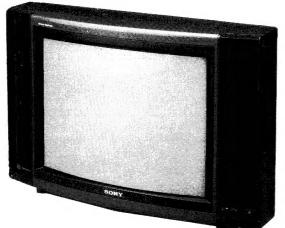
# **SERVICE MANUAL**



### AEP Model Australian Model

Chassis No. SCC-B14J-A



# AE-1 chassis

Note: The service manuals for RM-673 have been issued separately.

MODELS OF THE SAME SERIES				
KV-C27TD (AEP, AUS)	KV-21XSD/21XSTD (AEP)			
KV-X25TD (AEP)	KV-25XSD/25XSTD (AEP)			
KV-X21TD (AEP)				

#### **SPECIFICATIONS**

Television system

CCIR B, G and H

Colour system

PAL SECAM

Stereo system Channel coverage (AEP)

German two carrier system VHF channels E2-E12 UHF channels E21-E69

Cable TV channels S1-S20

Channel coverage (AUS)

(a total of up to 30 preselected channels) VHF channels 1-11

UHF channels 28-63

Picture tube

Trinitron tube

114-degree deflection Approx. 68cm (27 inches)

(Approx. 64cm picture measured diagonally)

Sound output

10W+10W (music power)

Inputs Outputs 21-pin connector: CENELEC standard Headphones jack: stereo minijack

External speaker terminals: 2-pin DIN

Power consumption

**Dimensions** 

Approx.  $810 \times 530 \times 480$ mm (w/h/d)

Weight

Approx. 43kg

Supplied accessories

RM-673 Remote Commander (1)

IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.





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#### SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARK 

ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

#### **SECTION 1 GENERAL**

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

#### 1-1. FIRST OF ALL

- Connect the aerial to the T socket on the rear of the This socket receives the standard 75-ohm aerial plug.
- Plug in the set.
- Tune in the available channels.

Use the buttons inside the front panel. To open the panel, press the centre.

To tune in all channels automatically:

- Press ♦ (Preset)
  Press PROGR to select the programme position from which tuning is to start.
- Press No (Auto programming).

The channels will be tuned in and memorized in consecutive positions, beginning from the programme position selected in step 2.

When tuning has been completed, the set returns to the position where tuning began.

To tune in a channel in any desired programme position. (e. g. the position with the same number as the channel):

- Press ♦ (Preset).

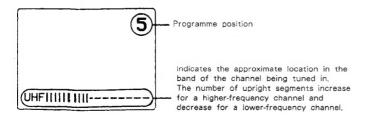
  Press PROGR to select the desired programme position.
- Press C (Clear).
- Press (Search) repeatedly until the desired channel appears.
- Repeat steps 2 to 4 for all channels, if required.
- Press 🕀 (Preset) again.

To have the unused programme positions skipped when  $\mbox{PROGR}+$  or  $\mbox{PROGR}-$  is  $\mbox{pressed}$ :

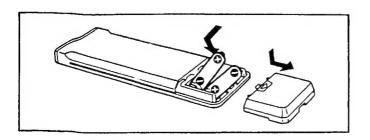
- Press 

  (Preset).
- Press PROGR to select the unused position.
- Press C (Clear).
- Repeat steps 2 and 3 for all unused position.
- Press (Preset) again.

#### On-screen display while tuning

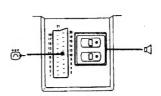


4 Insert two R6 batteries checking the correct polarity.



#### 1-2. CONNECTING OTHER EQUIPMENT

connectors on rear set



	Left external speaker terminal (2-pin DIN)	Connect to external speakers. The TV speakers will be
R/D/D	Right external speaker terminal (2-pin DIN)	disconnected. Speakers 8-16
Ö	21-pin connector (CENELEC standard)	Connect to a VTR micro computer, etc. using an optional connection cord. The picture of the TV channel being received is always output.

VTR operation using the supplied Commander

Remote operation of the VTR (8mm only) is limited to the features and functions of the VTR.

For further details, refer to the VTR manual.

When watching a video with the VTR connected to the connector, set the channel for the video to the programme number 0 or any empty channel between 20 and 29.

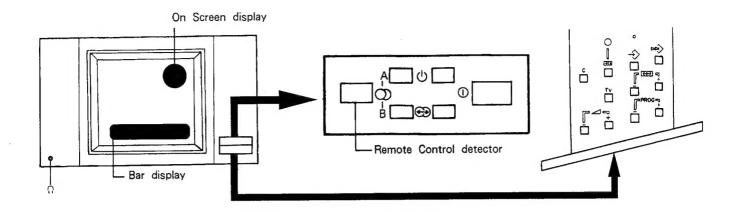
Move the VTR away from the TV, if the picture or sound is distorted.

#### 21 Pin Connector

Pin No	Signal	Signal level	
1	Audio output B (right)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*	
2	Audio input B (right)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*	
3	Audio output A (left)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*	
4	Ground (audio)		
5	Ground		
6	Audio input A (left)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*	
7	Blue input	0.7 V ±2 dB, 75 ohms, positive	
8	Function select (AV control)	High state (9.5-12 V): Part mode Low state (0-2 V): TV mode Input impedance: More than 10 k ohms Input capacitance: Less than 2 nF	
9	Ground (green)		
10	Open		
11	Green/Green with sync input	Green signal: $0.7 \text{ V} \pm 2 \text{ dB}$ , 75 ohms, positve Green with sync signal: $1 \text{ V} \pm 2 \text{ dB}$ , 75 ohms, positve	
12	Open		
13	Ground (red)		
14	Ground (blanking)		
15	Red input	(Same as Pin 7)	
16	Blanking input (Ys signal)	High state (1-3 V) Low state (0-0.4 V) Input impedance: 75 ohmes	
17	Ground (video output)		
18	Ground (video input)		
19	Video output	1 V ±2 dB. 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)	
20	Video input	1 V ±2 dB, 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)	
21	Common ground (plug, shield)		

\* at 20 Hz-20 kHz

#### 1-3 FUNCTION OF CONTROLS



#### On the set

On-screen display

Indicates programme numbers and G input modes.

Indicates the level of volume, colour, brightness, contrast, bass, treble and balance.

When the volume is at the minimum setting the balance \( \sim \) function will not operate.

① Power switch

To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operationof the set.

To ensure correct operation, push the switch in fully.

standby indicator

Lights up brightly when the set is in the standby mode.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

en space sound indicator

Lights up when  $\Theta$  on the Remote Commander is pressed.

A/B indicators

One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)

Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for bothchamnels.

Remote control detector

Point the Remote Commander towards this detector.

#### Inside the panel

#### neadphones jack (stereo minijack)

**⊞ SEARCH buttons** 

Press to fine tune a weak channel manually, if required. When I pressed, the I indicator (AFT) goes off and the AFT cricuit does not function on the selected channel.

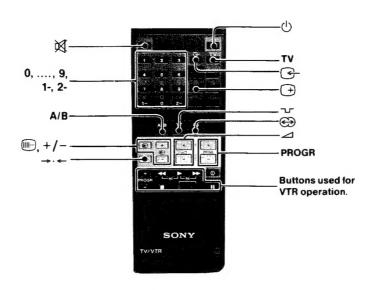
To restore the 知 AFT circuit on this channel, press 知 (AFT) so that the indicator lights up.

**∌**€ AFT button and indicator

Normally, press 冠 so that the indicator lights up. The AFT circuit automatically fine tunes the channel for the best possible picture.

✓ volume buttons

PROGR+, PROGR- programme scan buttons



#### On the Remote Commander

To operate the Commander, point it toward the remote control detector.

#### M mute button

0, ...., 9, 1-, 2- buttons

To tune into:

programme 15, press 1- and 5 programme 25, press 2- and 5

Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

Press again and adjust (colour), then (brightness), (bass), (treble) and (balance).

#### → · ← reset button

Press to reset colour and contrast and brightness to factoryset levels.

standby button

Press to change to the standby mode. Use this button to turn off the set for short periods of time.
To turn on the set, press TV or the programme number; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

Press to change to the TV mode from the standby or G input modes.

input button

Press to view the input picture coming in through the © connector. lights up on the screen.

Press TV or the programme number to return to the TV mode.

□ loudness button

Press to emphasize high and low notes.

on-screen display button.

Press to make the display appear on the screen. Press again to make them disappear.

n space sound button

Press to obtain special acoustic effects.

#### ∠ volume buttons

#### PROGR programme scan buttons

Buttons not referred to on this page or next page do not operate.

#### 1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

#### Operation

- Select the TV channel for the desired teletext 1 service.
- Press (TEXT / MIX) to display the teletext service.
  Once has been pressed, the TV channel cannot be changed.
- Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletext service can be displayed directly from the standby mode, by pressing  $\square$   $\nearrow$  .

To receive the teletext service of a different TV channel.

- Press TV to return to the TV mode.
- Select the desired TV channel. Press (2).

#### Note

To receive the teletext service accurately, keep FR inside the panel switched on during teletext operation

To display the index page. Press (INDEX).

If the necessary signal is not being broadcast, page 100 is displayed.

To rapidly access the next or preceding page press (PAGE+) or (PAGE-).

To superimpose the teletext display on the TV picture. Press (F) twice from TV mode. Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed. Press (TEXT CL).

This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated

/changed.
Press ☑ HOLD. The HOLD symbol appears at the top of the screen.



To resume normal teletext reception, press /MIX.

To enlarge the teletext display.

Press 🧐.

Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display; press again to return to the normal display.

To reveal concealed infomation such as the answers to a quiz

Press (REVEAL)

Press again to conceal the answers.

To adjust the contrast of the teletext display. When in teletext mode, adjust by using the + or -keys adjacent to the week,

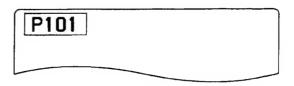
To watch the TV programme while waiting for a requested page to be displayed.

Request new page.

Press to watch the TV programme.

The requested page number appears at the top left of the screen.

When the requested page has been captured, the page number is desplayed in the top left hand corner of the screen.



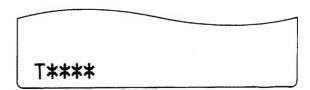
To view this page, press 🖹 / 🔊.

To have a requested page displayed at a predetermined time.

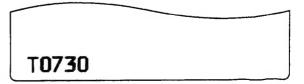
- Request a time coded page (e.g. alarm page).

  Press (TP ON).

  "T\*\*\*\* will appear at the bottom of the screen.



Enter your request time with the number buttons, using four digits. For example, 07:30.



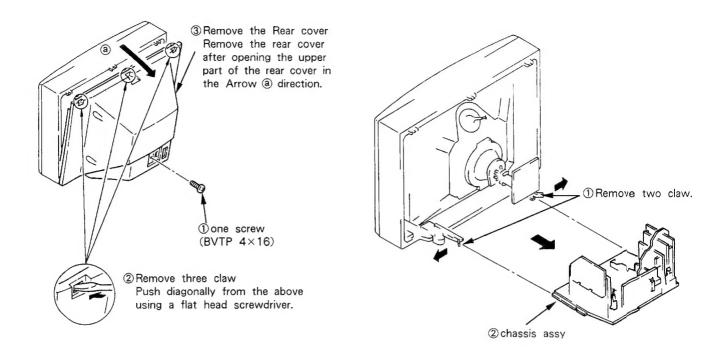
To watch the TV programme until the requested time, press (3). At the requested time, the page number will be displayed at the botton of the screen. To view this page, press 🖹 / 🕏.

To cancel the request, first ensure that the teleax page is displayed, then press (TP OFF).

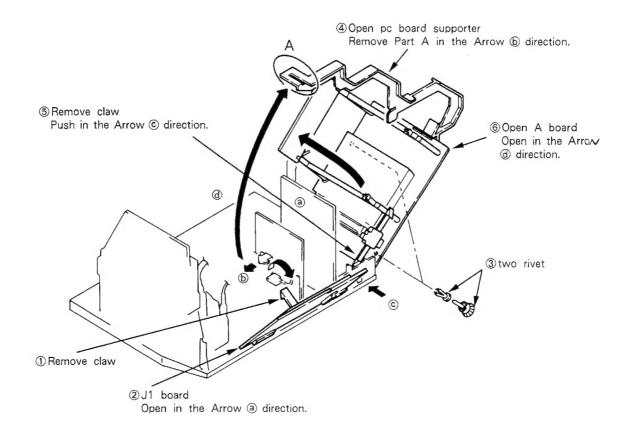
# SECTION 2 DISASSEMBLY

#### 2-1, REAR COVER REMOVAL

2-2. CHASSIS ASSY REMOVAL

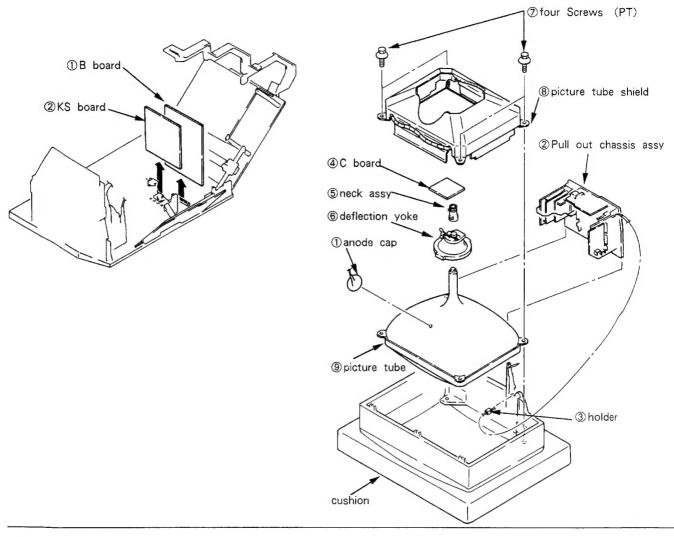


#### 2-3, J1, A AND V BOARDS REMOVAL

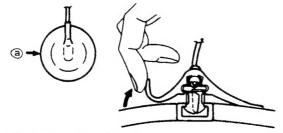


#### 2-4. KS AND B BOARDS REMOVAL

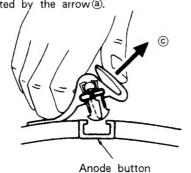
#### 2-5. PICTURE TUBE REMOVAL

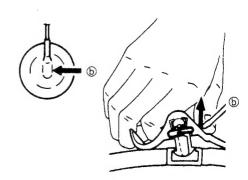


#### Removing Procedures



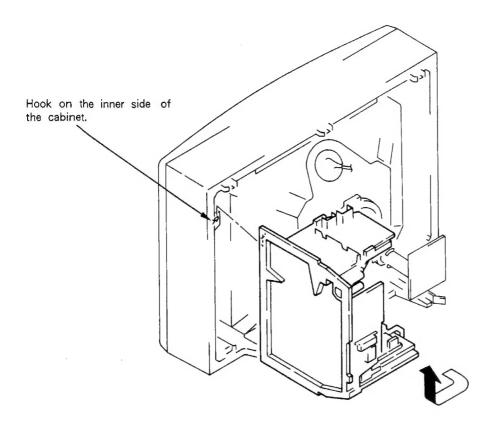
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.





- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⑥.
- When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ©.

#### 2-6. SERVICE POSITION



# SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted,

The control and switch below should be set as follows unless otherwise noted:

◆ CONTRAST control ······· 80% (or Normal by Commander)

☆BRIGHTNESS control ··· 50%

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. White Balance

Note: Test Equipment Required.

- 1. Colour Bar/Pattern Generator
- 2, Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

#### 3-1. BEAM LANDING

- Turn the raster signal of the pattern generator to red.
- 3. Move the deflection yoke backward, and adjust with the purity control so that red is in the centre and blue and green are at the sides, evenly. (Fig. 3-1-3-3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes red, (Fig. 3-1)
- Switch over the raster signal to blue and green and confirm the condition,
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corners is not right, adjust by using the magent, (Fig. 3 4)



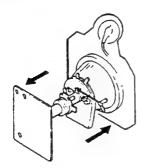
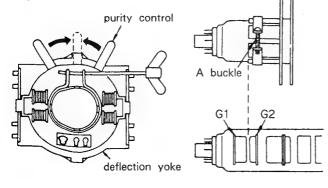
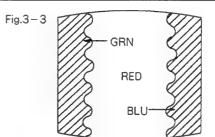
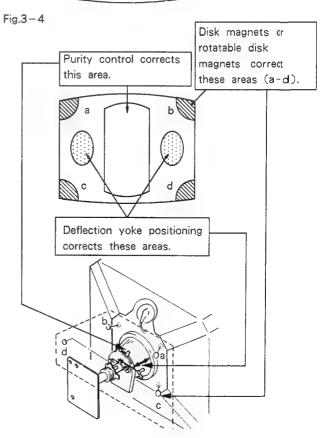


Fig.3-2



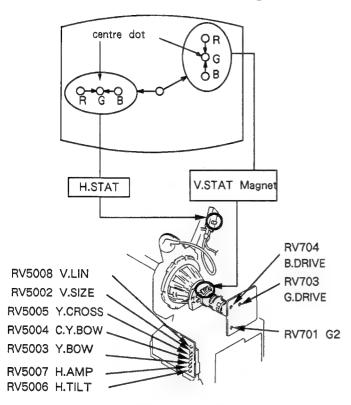




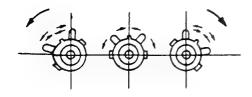
#### 3-2. CONVERGENCE

#### Preparation:

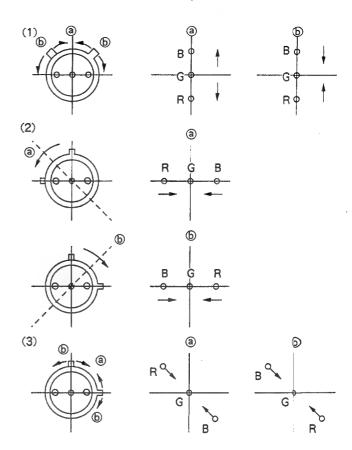
- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern,
- (1) Horizontal and Vertical Static Convergence



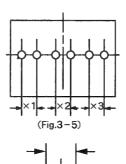
- Adjust H. STAT VR to coincide red, green and blue dots on the centre of screen. (Horizontal movement)
- Adjust V. STAT magnet to coincide red, green and blue dots on the centre of screen. (Vertical movement)
- If the red, green and blue dots do not coincide on the centre of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

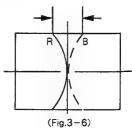


4. When the V, STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

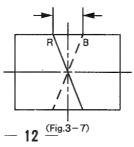


- (2) Adjustment of Dynamic Convergence
- 1. Adjust H TILT (RV-5006) so that  $X_1$ ,  $X_2$ , and  $X_3$ , are equal.
- Adjust H AMP (RV-5007) so that X2, and X3, are equal.
- Adjust H STATIC so that the dots are overlapped,
- If dynamic convergence is not sufficiently adjusted after performing the above steps, repert Steps 1 through 3 (Fig.3-5)





Adjust Y. BOW (RV-5003) to correct the arrow-shaped misconvergence along the y axis. (Fig.3-6)



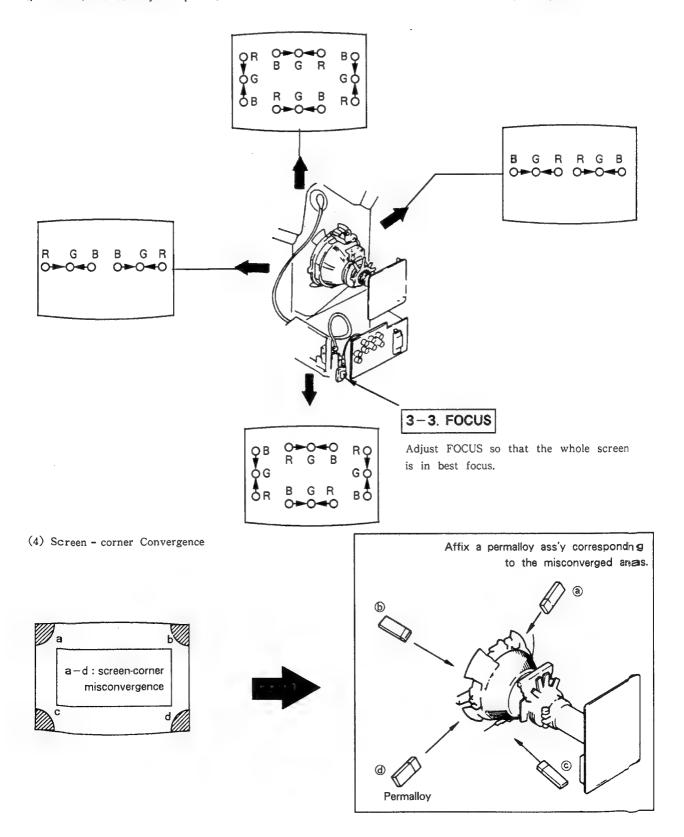
Adjust Y. CROSS (RV-50)5) to correct the cross misconneggence along the y axis. (Fig. 3-7)

#### (3) Dynamic Convergence Adjustment

#### Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.



#### 3-4. WHITE BALANCE

(Screen (G2) Setting)

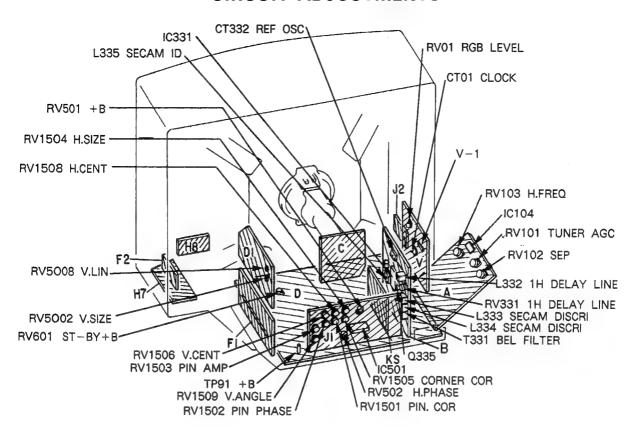
- 1. Input dot signals from the pattern generator.
- 2. Set the picture BRIGHTNESS control to the minimum level,
- Apply 170 V dc to the cathodes of R, G, and B from an external power source.
- While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

#### (White Balance Adjustment)

- 1. Input all-white signals from the pattern generator.
- Adjust the BRIGHTNESS and COLOUR controls to the standard level,
- 3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOUR and BRIGHTNESS controls are set to normal unless otherwise specified.

# SECTION 4 CIRCUIT ADJUSTMENTS



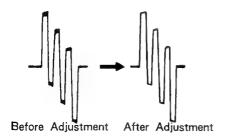
#### 4-1.B BOARD ADJUSTMENTS

#### REF OSC Adjustment (CT332)

- 1. Input a PAL COLOUR BAR pattern,
- 2. Short circuit between pin @ of IC331 and ground.
- 3. Adjust CT332 to obtain colour synchronization.
- 4. Remove the jumper wire from IC331.

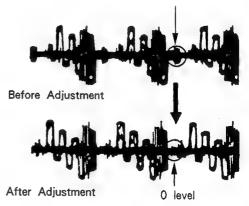
#### 1H DELAY LINE Adjustment (L332, RV331)

- 1. Input a PAL COLOUR BAR pattern.
- Connect the oscilloscope to pin (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope,
- Adjust L332 to minimize the double waveform outline.



- 4. Input a PAL TEST COLOUR BAR pattern,
- 5. Rotate the RV331 VR and adjust till the ANT PAL part of the waveform matches the Olevel.

This part matches the 0 level.



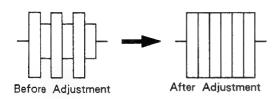
6. L332 and RV331 affect each other, so repeal till the conditions of both are met,

#### SECAM ID Adjustment (L335)

- 1. Input SECAM COLOUR BAR signal.
- 2. Connect a Digital Multi meter at pin 2 of 1(331.
- 3. Adjust L335 so that the indicater goes up to  $\ensuremath{t}$  he maximum.

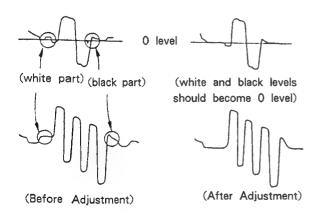
#### BELL FILTER Adjustment (T331)

- 1. Input SECAM COLOUR BAR pattern.
- 2. Connect an oscilloscope to the emitter of Q335.
- Adjust T331 so that the waveform becomes flat.



#### SECAM DISCRI Adjustment (L333, L334)

- 1. Input SECAM COLOUR BAR pattern.
- 2. Connect an oscilloscope at pin ① of IC331.
- 3. Adjust L333 so that white and black part of the waveform of pin ① becomes 0 level.
- 4. Connect an oscilloscope at pin 3 of IC331.
- Adjust L334 so that white and black part of the waveform of pin 3 becomes 0 level,



#### 4-2. D BOARD ADJUSTMENTS

#### +B Adjustment (RV501)

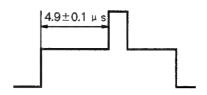
- 1. Connect a Digital Multimeter to TP91.
- 2. Adjust RV501 so that the voltage becomes  $135 \pm 0.2 \text{ V}$ .

#### ST-BY + B Adjustment (RV601)

- 1. Set up 🖒 standby (Remote Commander) mode,
- 2. Connect the digital multimeter to TP91.
- 3. Adjust RV601 so that the voltage becomes  $135 \pm 3 \text{ V}$ .
- 4. Release the 🖒 standby (Remote Commander) mode.

#### H. PHASE Adjustment (RV502)

- 1. Input the PAL TEST COLOUR BAR pattern.
- 2. Set the CONTRAST and BRIGHTNESS controls to the standard positions,
- Set RV1508 (H. CENT) to the mechanical centre position,
- Connect an oscilloscope to pin (I) (SPC OUT) of IC501,
- 5. Rotate RV502 and adjust Block T to  $4.9\pm0.1\,\mu$  s.



#### 4-3. A BOARD ADJUSTMENT

#### TUNER AGC Adjustment (RV101)

- 1. Tune in an off-air signal.
- 2. Adjust RV101 so that snow-noise and cross-modulation just disappear from the picture.

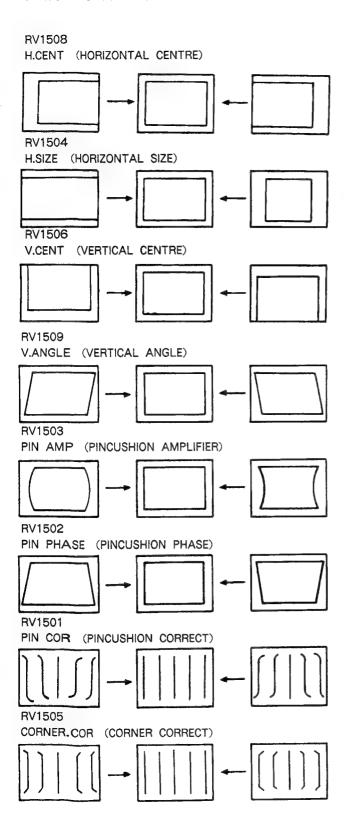
#### STEREO SEPARATION Adjustment (RV102)

- 1. Input stereo signal (L-CH 1kHz, R-CH 400Hz)
- 2. Check the stereo indicator.
- 3. Connect an oscilloscope to the pin ① (L) of CNA11 through band pass filter of 1kHz,
- 4. Adjust RV102 so that 1kHz voltage goes down to the minimum,

#### H. FREQ. Adjustment (RV103)

- 1. Input PAL COLOUR pattern.
- 2. Short circuit between pin @ of IC104 and ground.
- 3. Connect a frequency counter to the pin © of IC104 through a probe of 10:1.
- Adjust RV103 so that H. frequency becomes 15,625±50Hz.

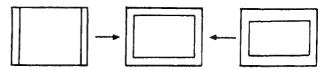
#### 4-4. J1 BOARD ADJUSTMENTS



#### 4-5. D. BOARD ADJUSTMENTS

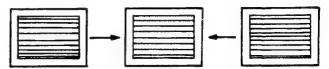
RV5002

V.SIZE (VERTICAL SIZE)



RV5008

L.LIN (VERTICAL LINEARITY)



#### 4-6. V BOARD ADJUSTMENTS

#### Clock Adjustment (CT01)

- 1. Disconnect the V-1 connector,
- 2. Set up the TELE TEXT mode.
- 3. Adjust CT01 to stop pictures from scrolling.

#### RGB Level Adjustment (RV01)

- 1. Set PICTURE to maximum.
- 2. Adjust RV01 till the RGB output becomes 0.65V.

#### 4-7. SUB ADJUSTMENTS

#### SUB BRIGHTNESS Adjustment

- 1. Receive and display a TEST COLOUR BAR pattern.
- Push → ← on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414), (SUB mode is invoked,)
- 5. Reduce the ① CONTRAST to the minimum level.
- Adjust the 

  BRIGHTNESS control until the 0
  IRE of the gray scale becomes completely cut off,
  and the 20 IRE becomes barely luminous.
- 7. Push the AFT button (SUB mode is cleared)

Where no TEST COLOUR BAR pattern is available,

- 1. Display a COLOUR BAR pattern.
- Push → ← on the remote commander to invoke the normal state.
   Set the ③ COLOUR to normal mode.

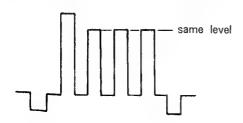
Steps  $3\sim5$  are the same as above.

- 6. 20 IRE is close to blue, so adjust the 

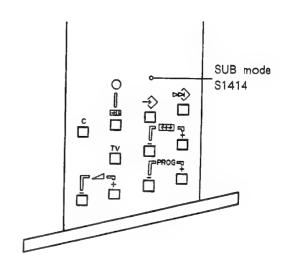
  ☼ BRIGHTNESS control till blue is faintly luminous.
- 7. Same as Step 7 above.
- Push → ← on the remote commander to invoke the normal state.
- \* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

#### SUB COLOUR Adjustment

- 1. Display a COLOUR BAR pattern.
- 2. Push → ← on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
- Adjust the COLOUR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
- 6. Push the AFT button (SUB mode is cleared.)

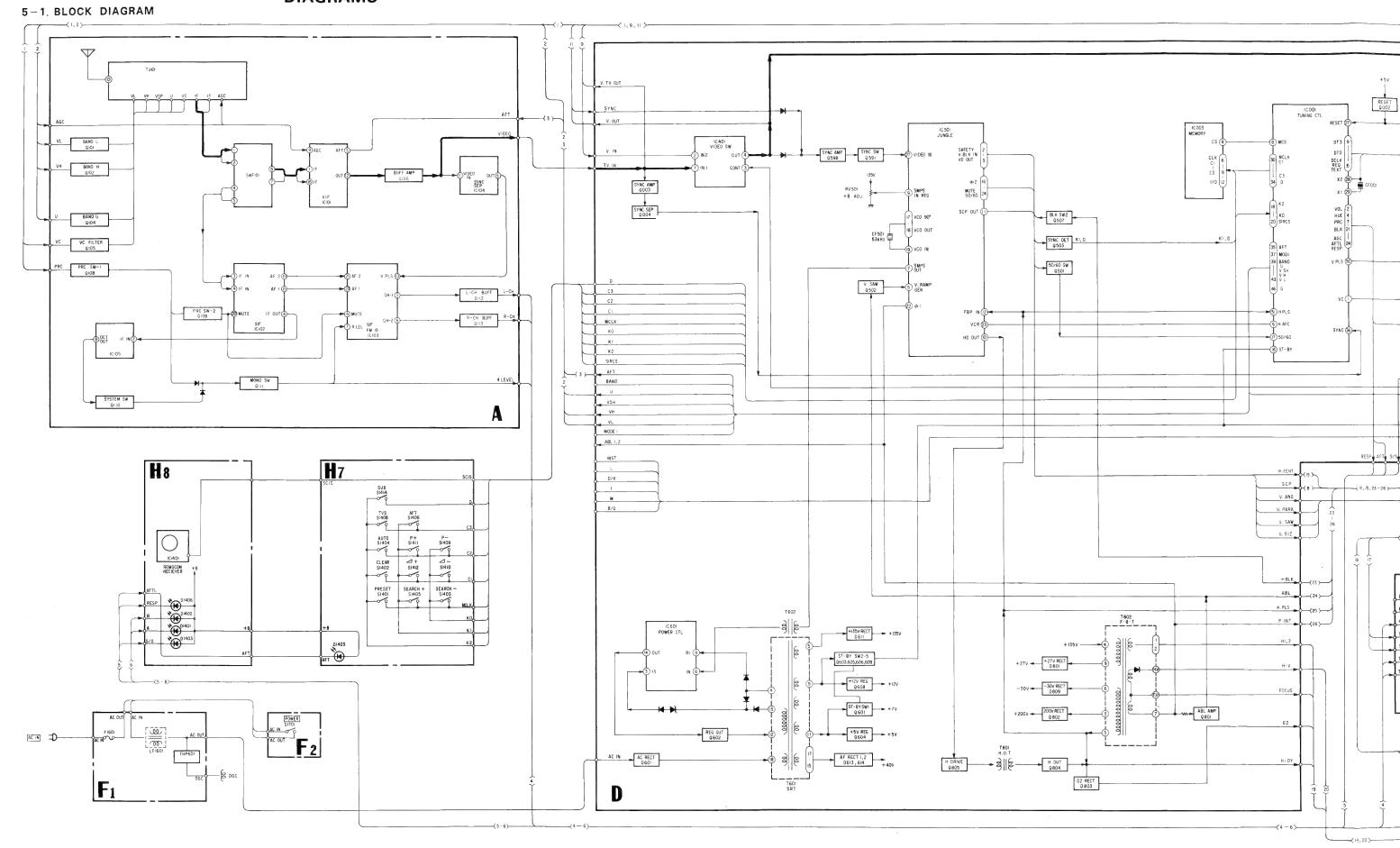


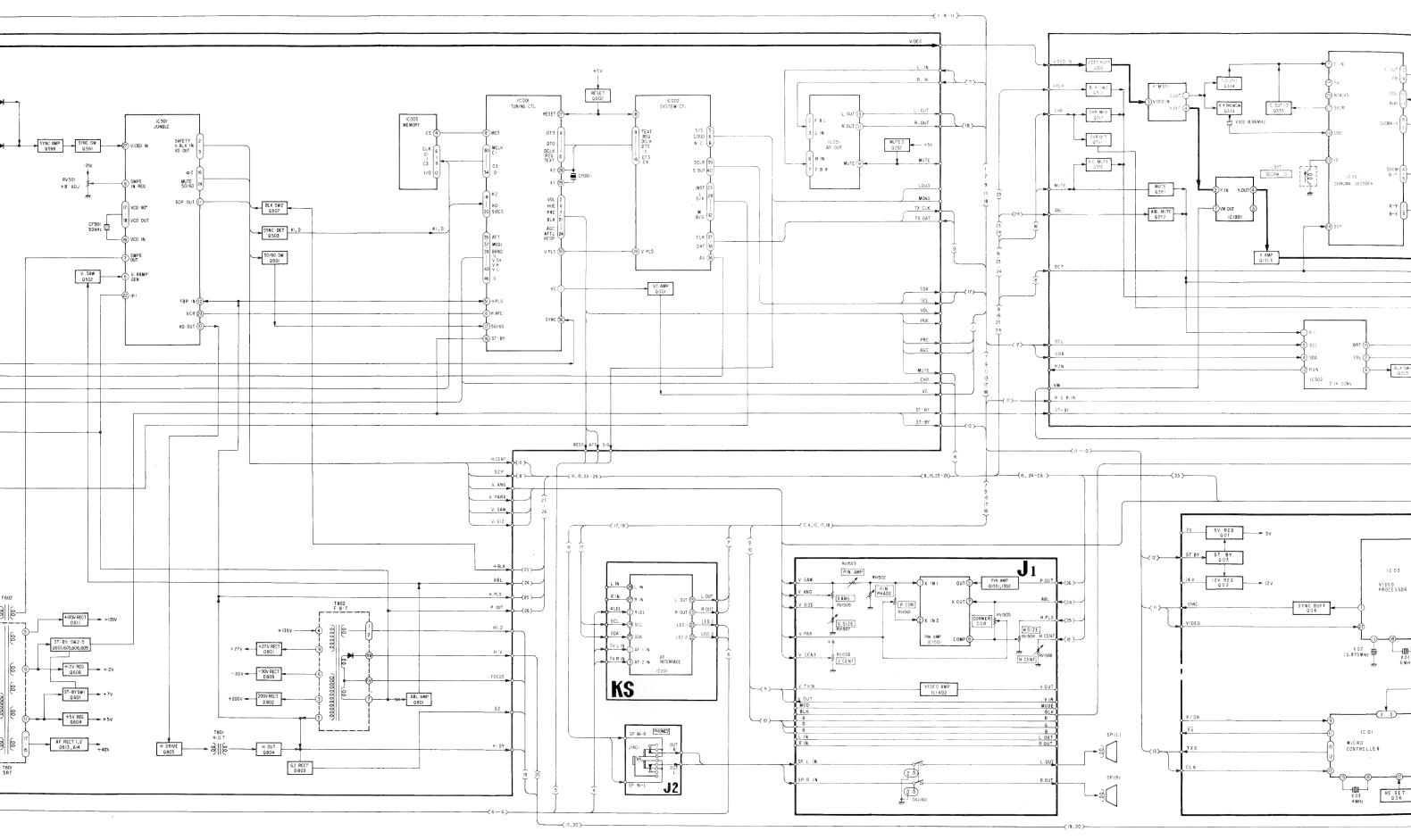
\* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment with 30 seconds, or repeat from Step 4.

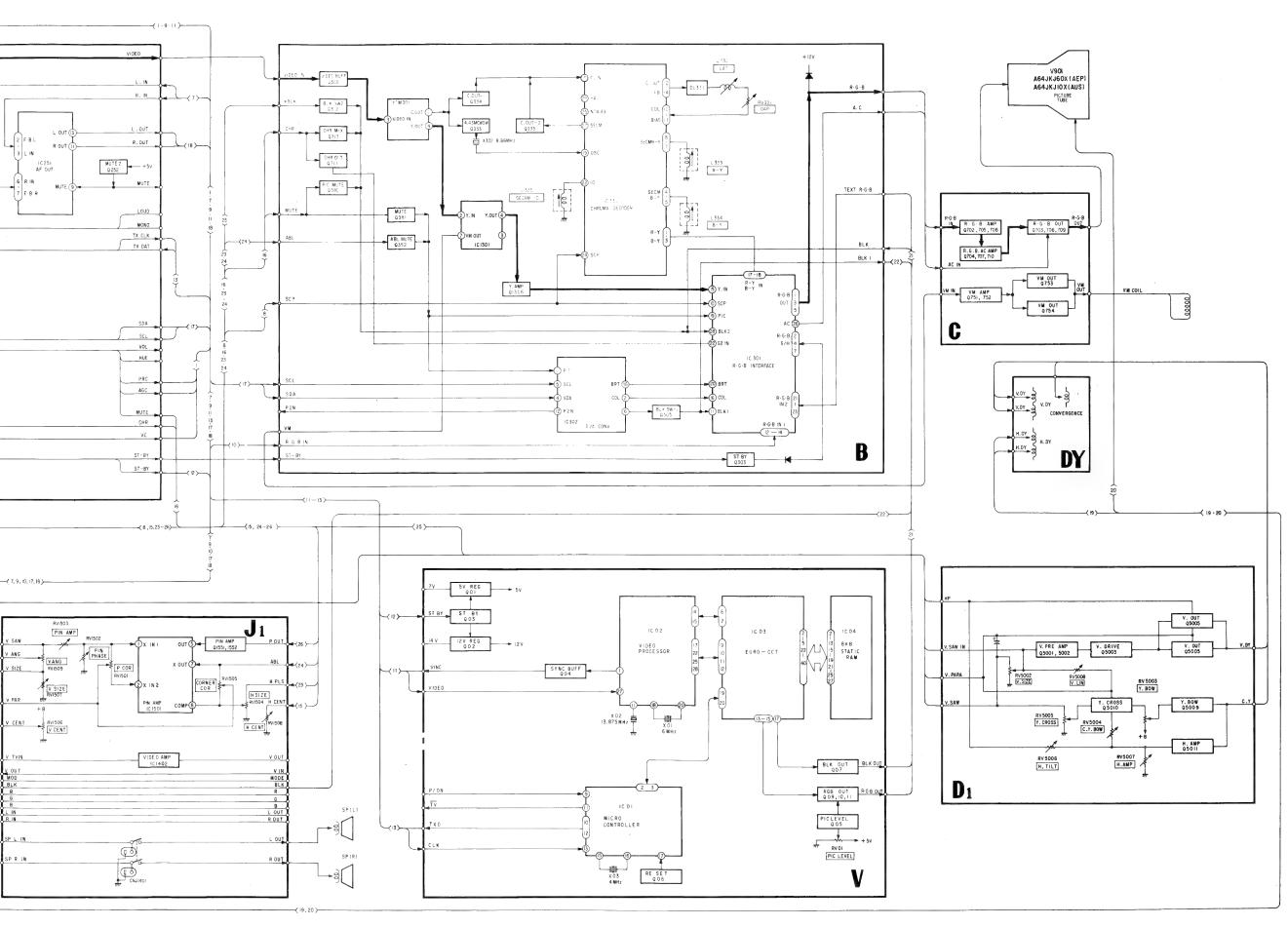


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# SECTION 5 DIAGRAMS







## KV-C27TD KV-C27TD RM-673

# D1 C B J2 H7 F1 D J1 KS

5-2, CIRCUIT BOARDS LOCATION

5-3. SCHEMATIC DIAGRAM (1)

#### Note

- All capacitors are in μF unless otherwise noted, pF: μμF
   50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch : 5mm Rating electrical power : 1/4W

- All resistors are in ohms.
- : nonflammable resistor.
- △ : internal component.
- : panel designation.
- All variable and adjustable resistors have characteristic curve B,unless otherwise noted.
- All voltages are in V.
- $\bullet$  Readings are taken with a 10M  $\Omega$  digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- : B+line
- = = : B-line
- : signal path.

#### Reference information

RESISTOR : RN METAL FILM : RC SOLID

: FPRD NONFLAMMABLE CARBON : FUSE NONFLAMMABLE FUSIBLE

: RS NONFLAMMABLE WIREWOUND : RB NONFLAMMABLE CEMENT

COIL : LF-8L MICRO INDUCTOR
CAPACITOR : TA TANTALUM
: PS STYROL

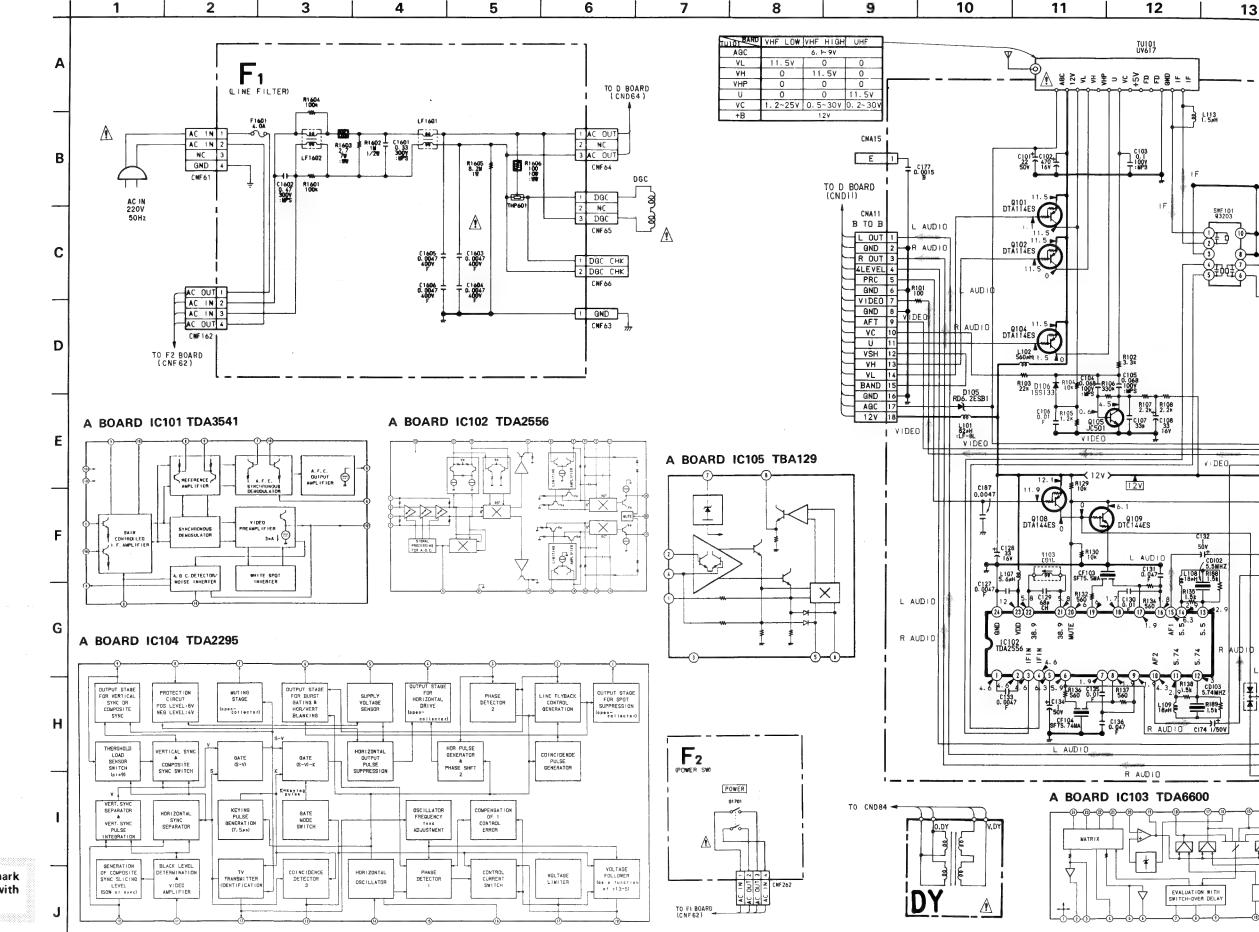
: PP POLYPROPYLENE
: PT MYLAR

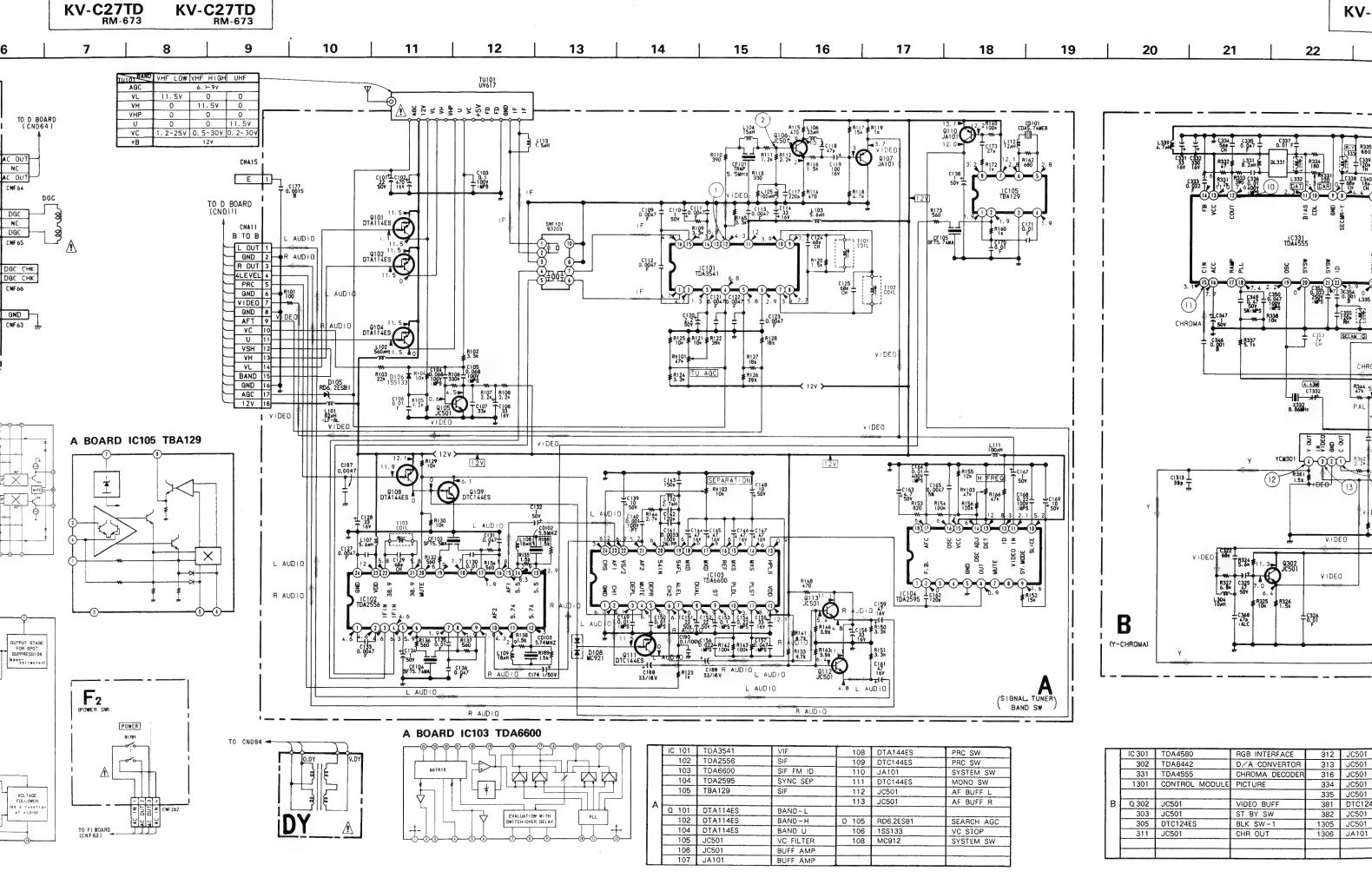
: MPS METALIZED POLYESTER
: MPP METALIZED POLYPROPYLENE

: ABL BIPOLAR

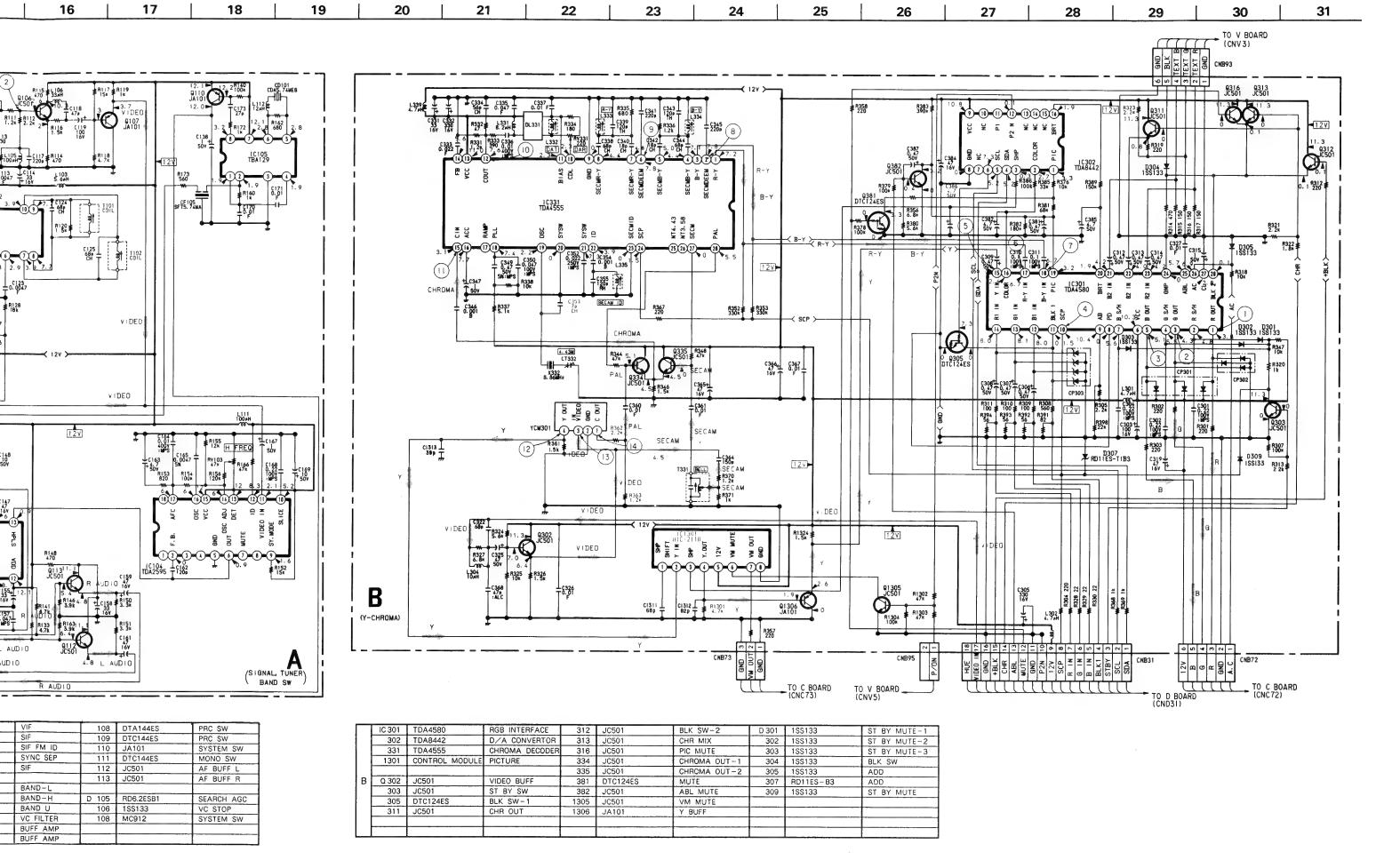
: ALT HIGH TEMPERATURE

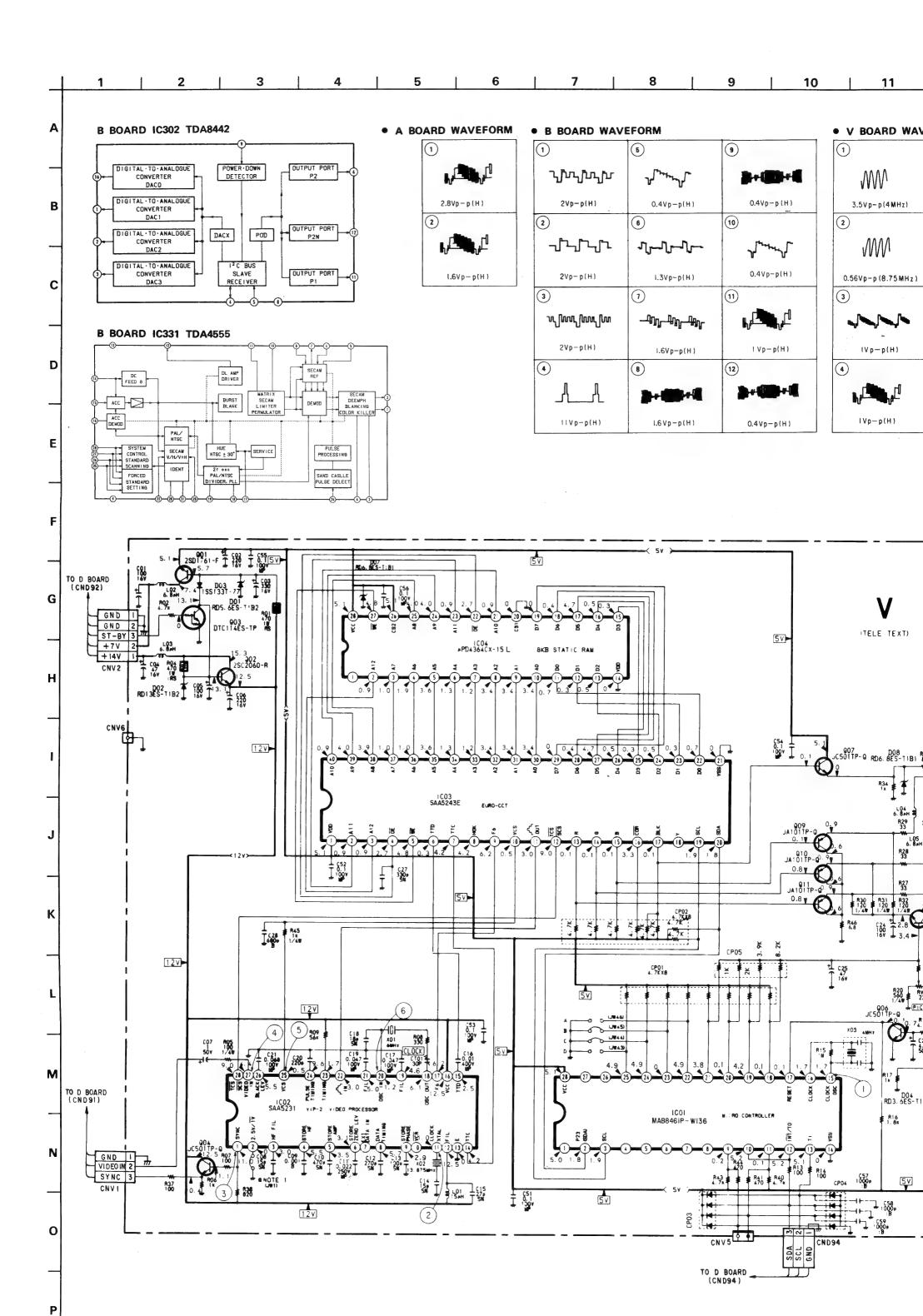
: ALR HIGH RIPPLE

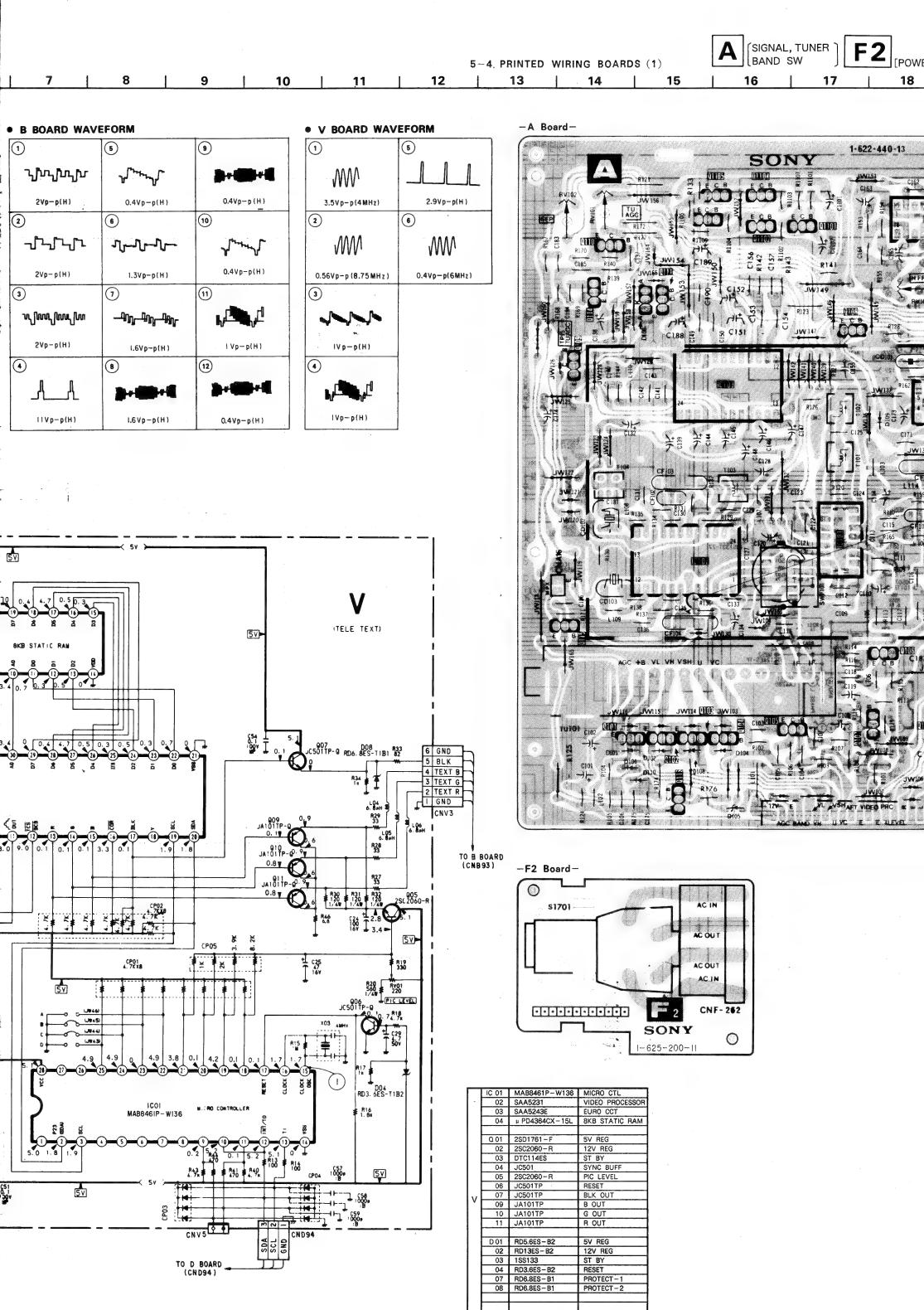


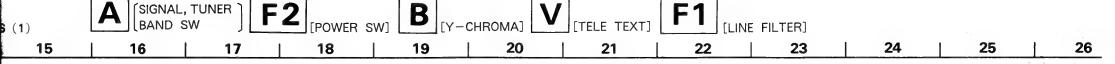


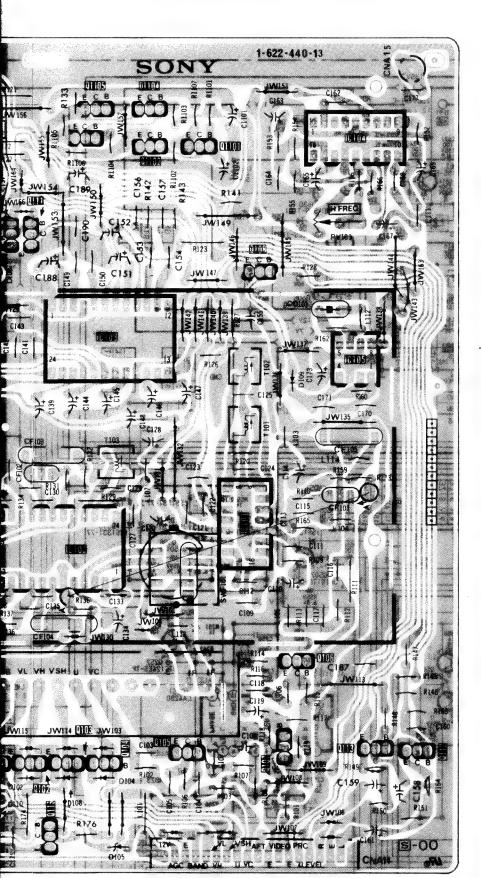
KV-C27TD RM-673 KV-C27TD RM-673

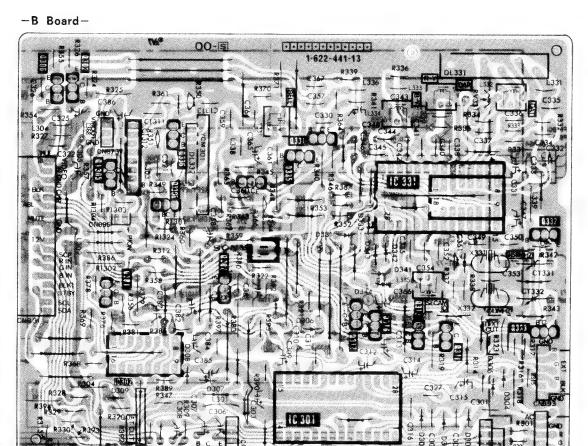


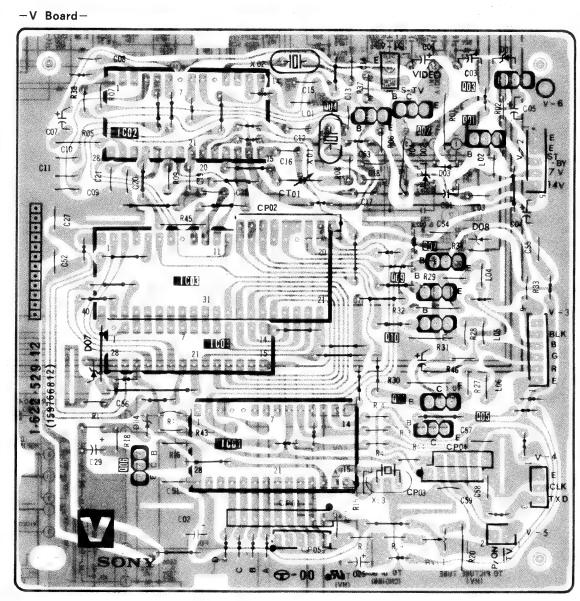


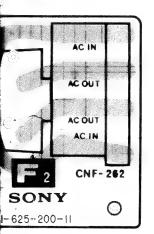




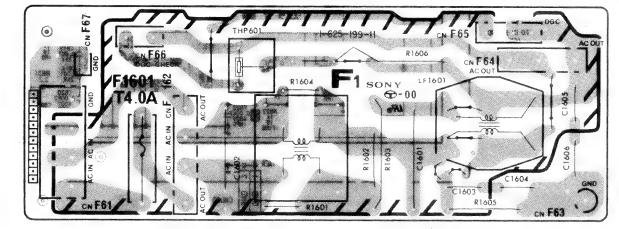


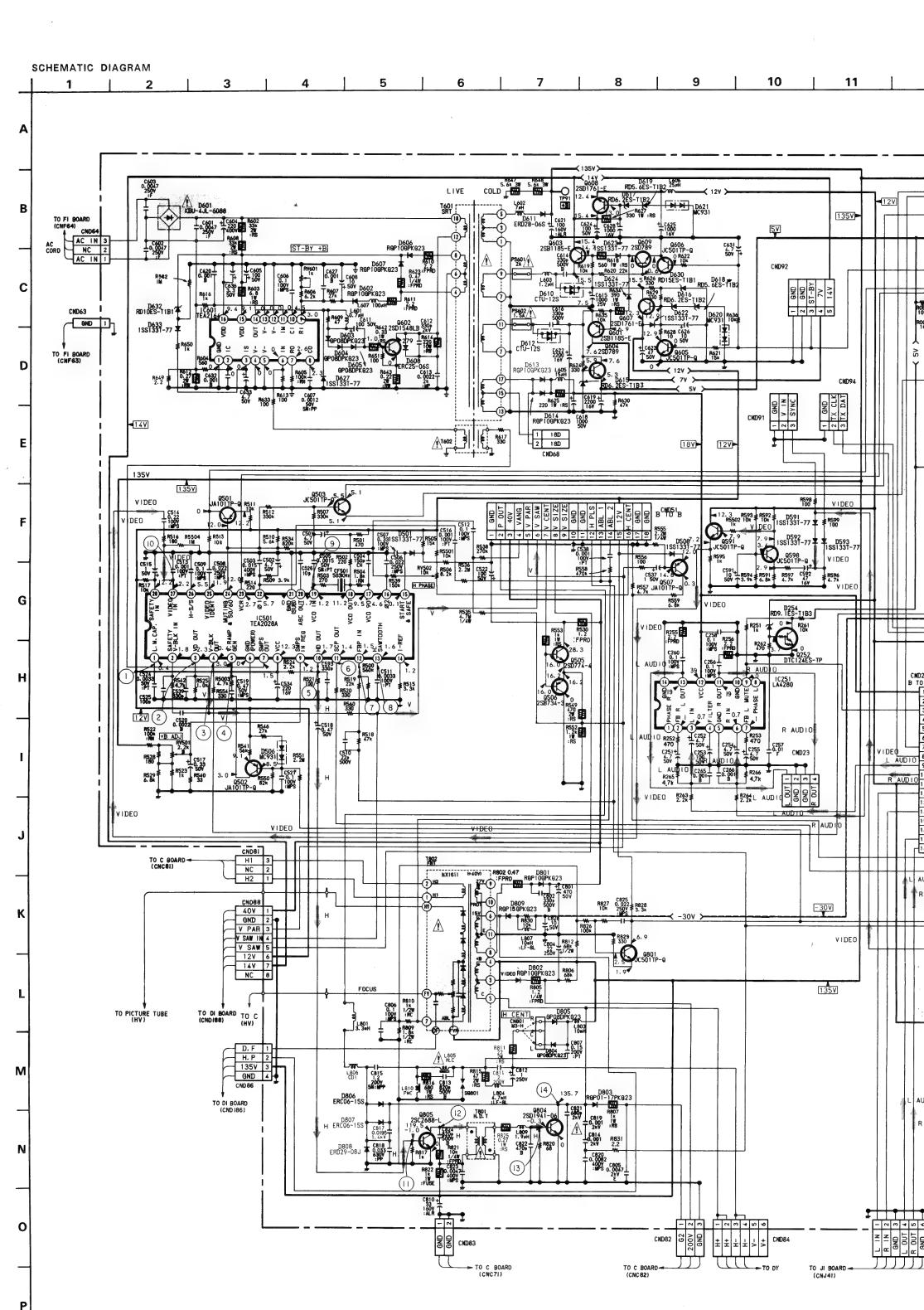


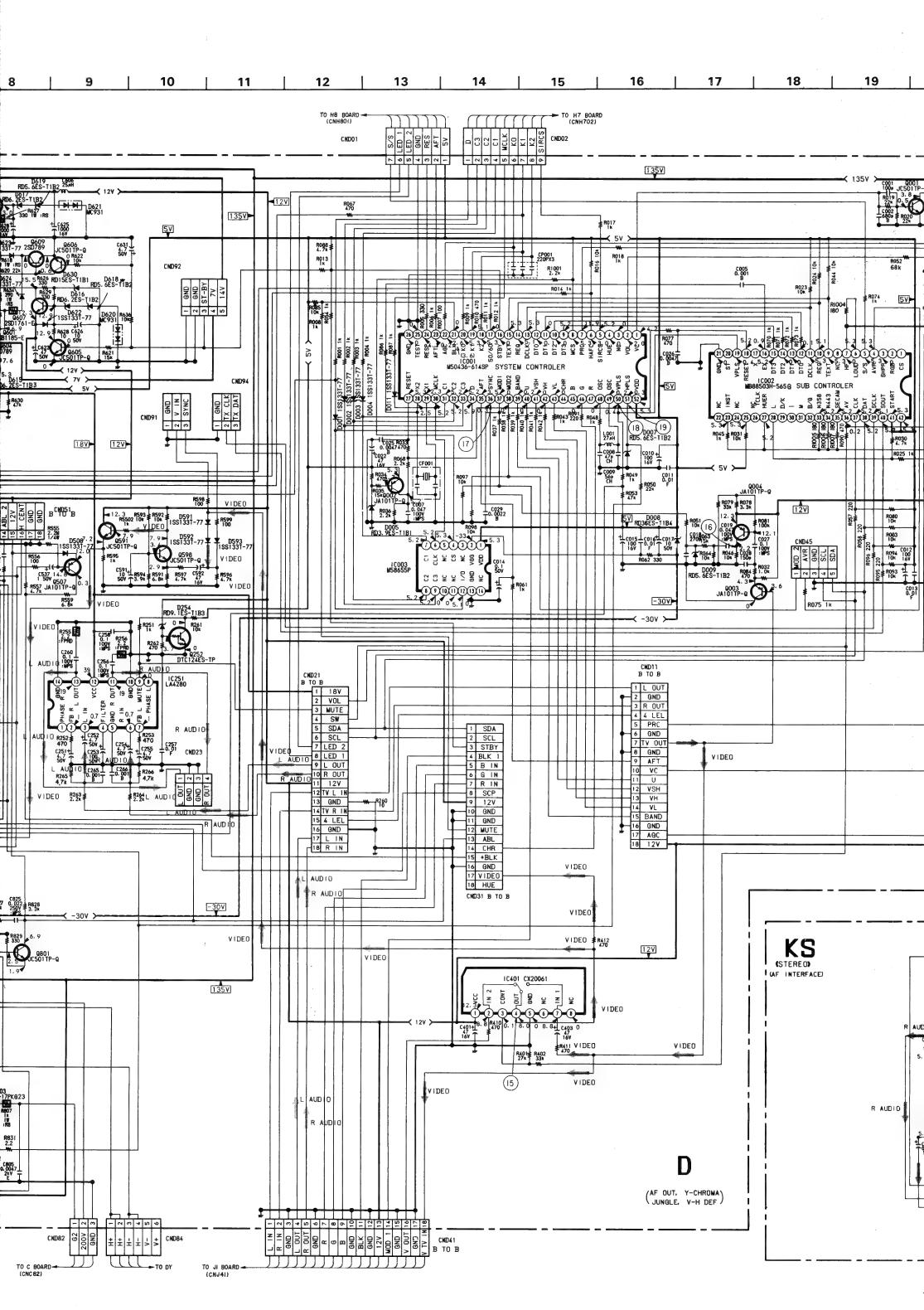


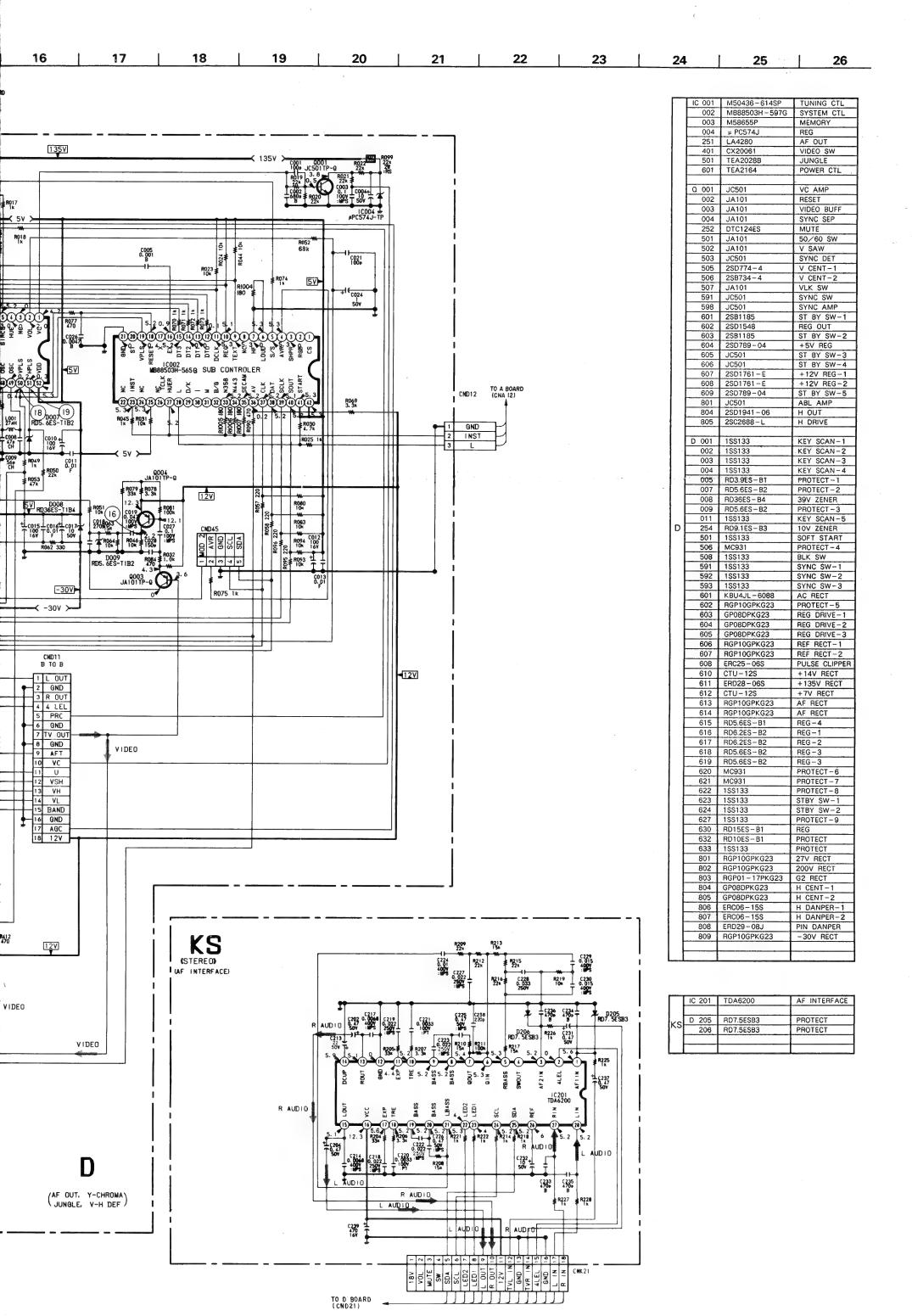


-F1 Board-





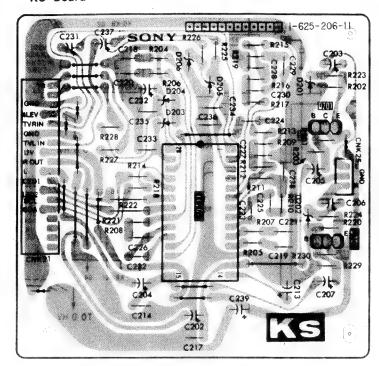


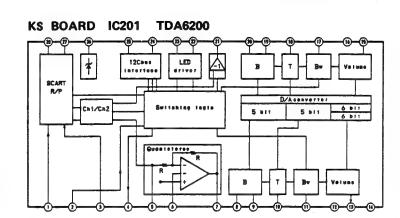


[AF OUT, Y-CHROMA]

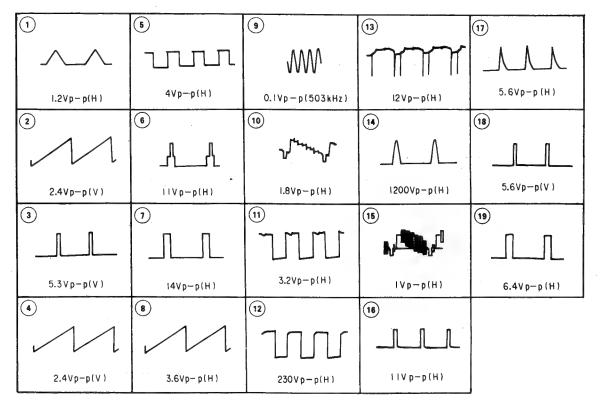
#### PRINTED WIRING BOARDS (2)

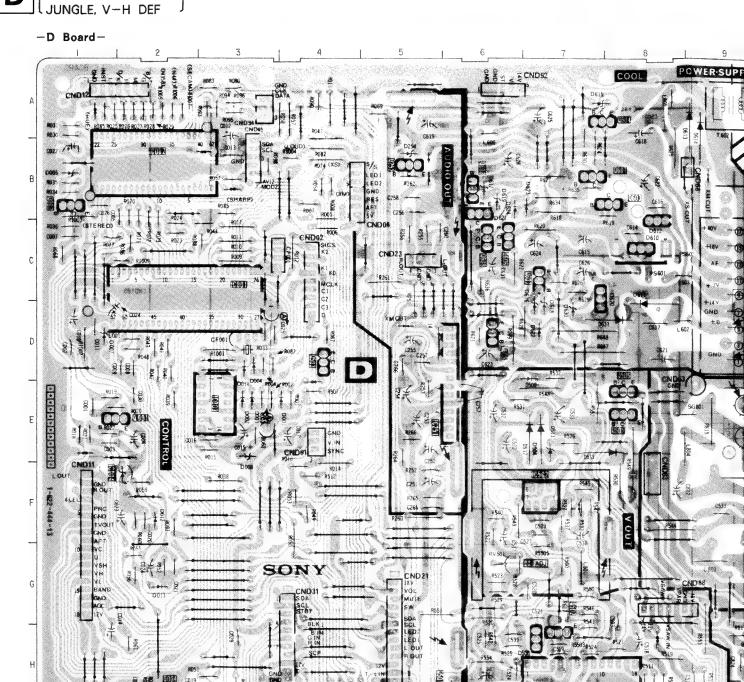
#### -KS Board-



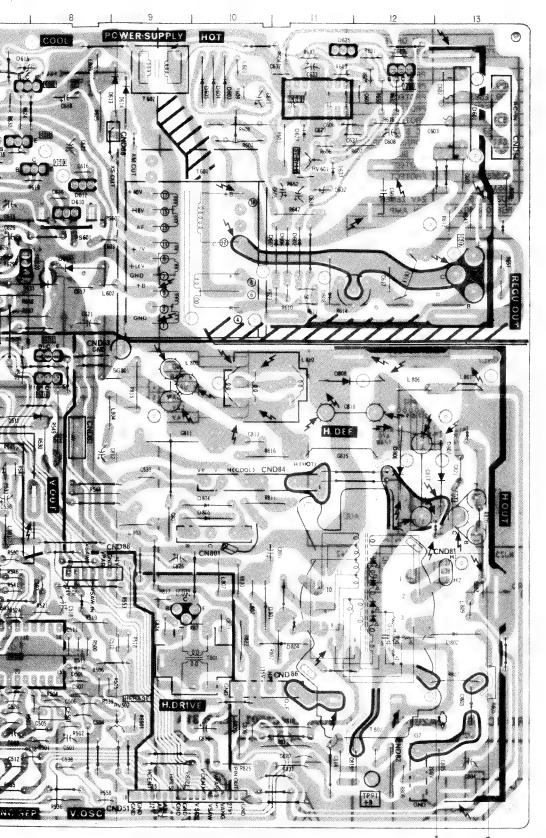


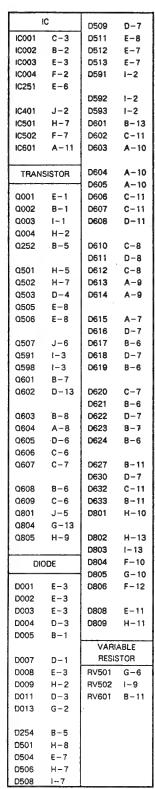
#### • D BOARD WAVEFORM

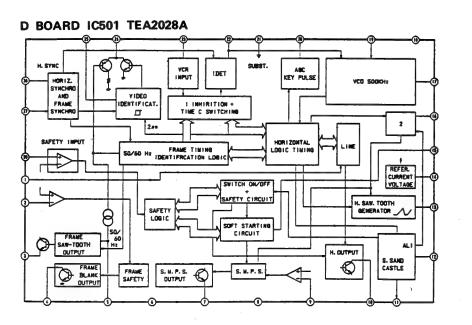


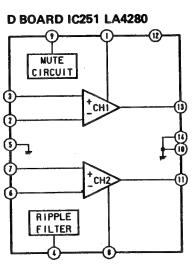


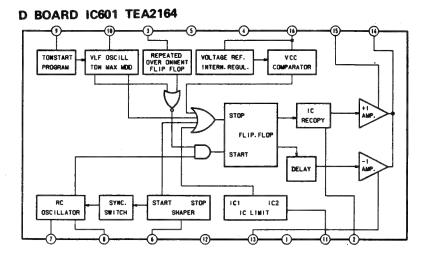
V.OSC CND5188







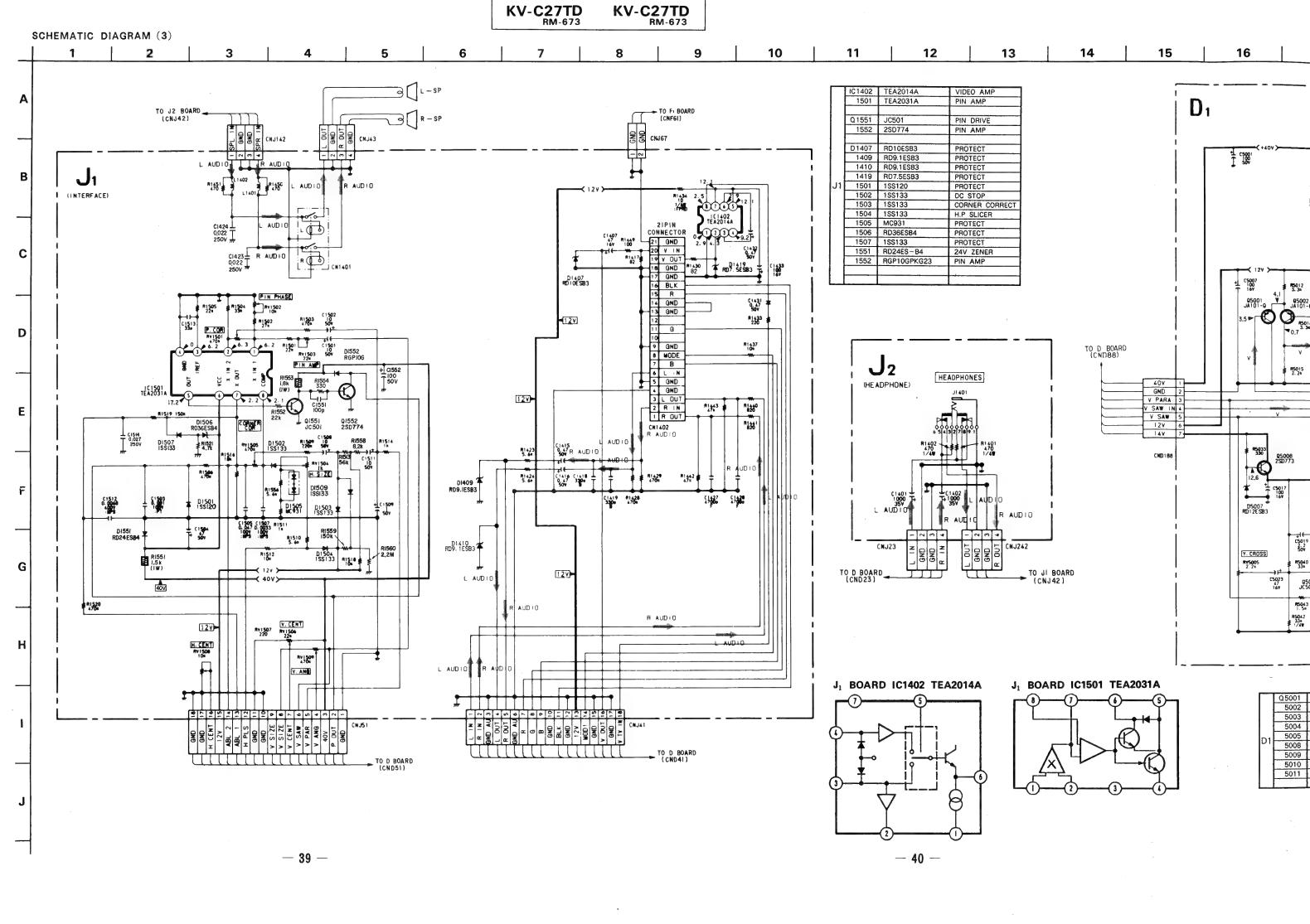




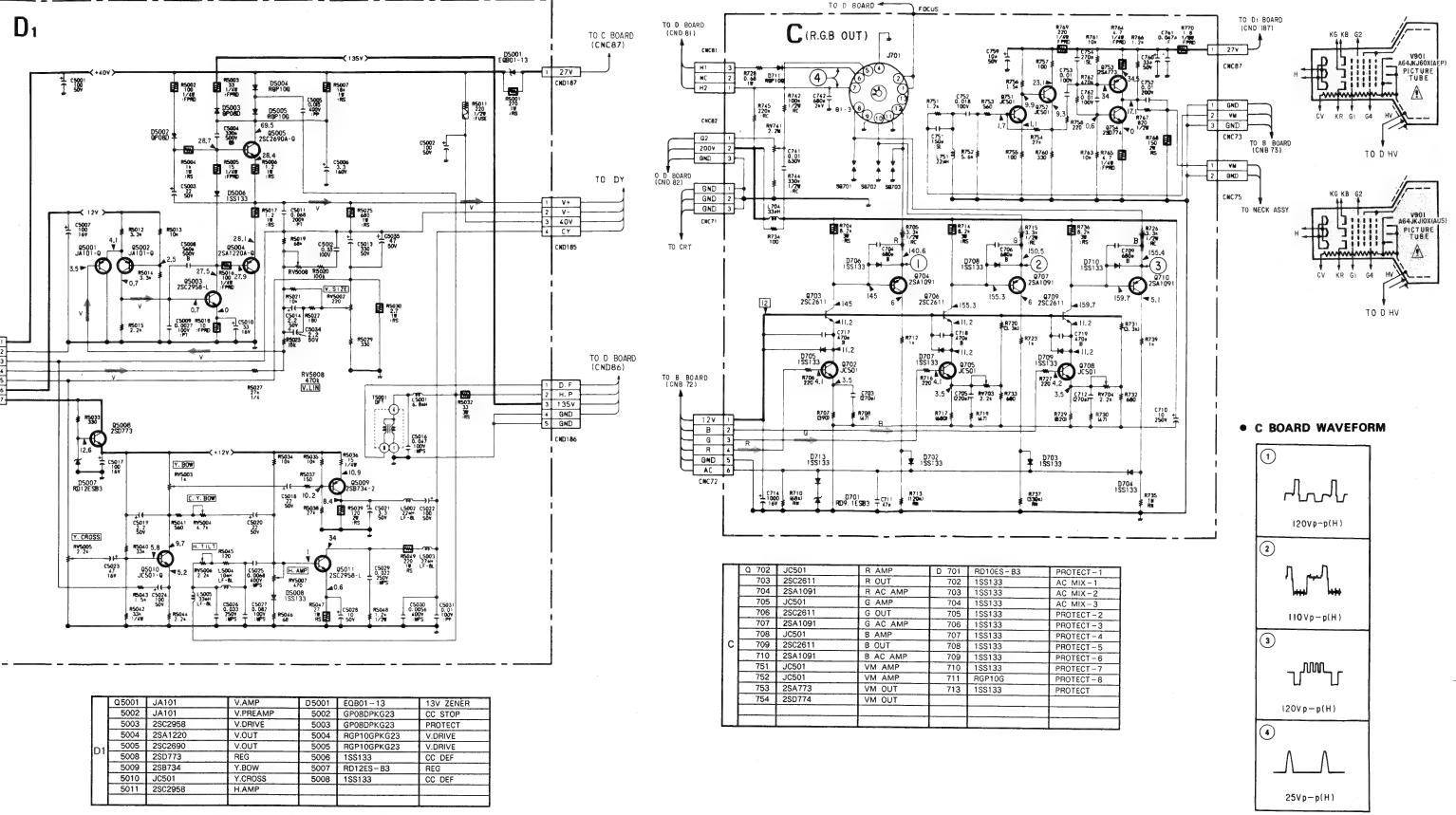


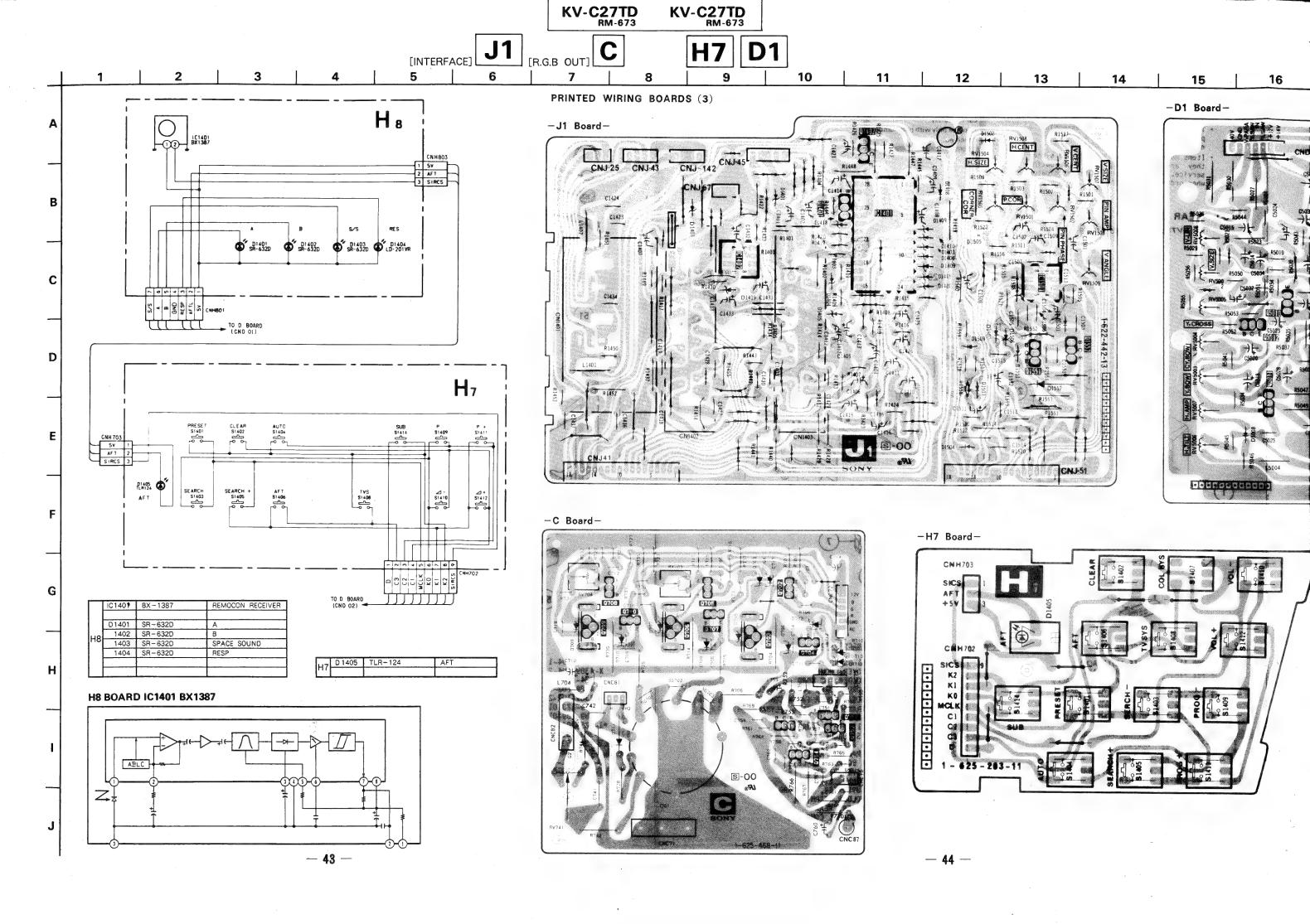
#### NOTE:

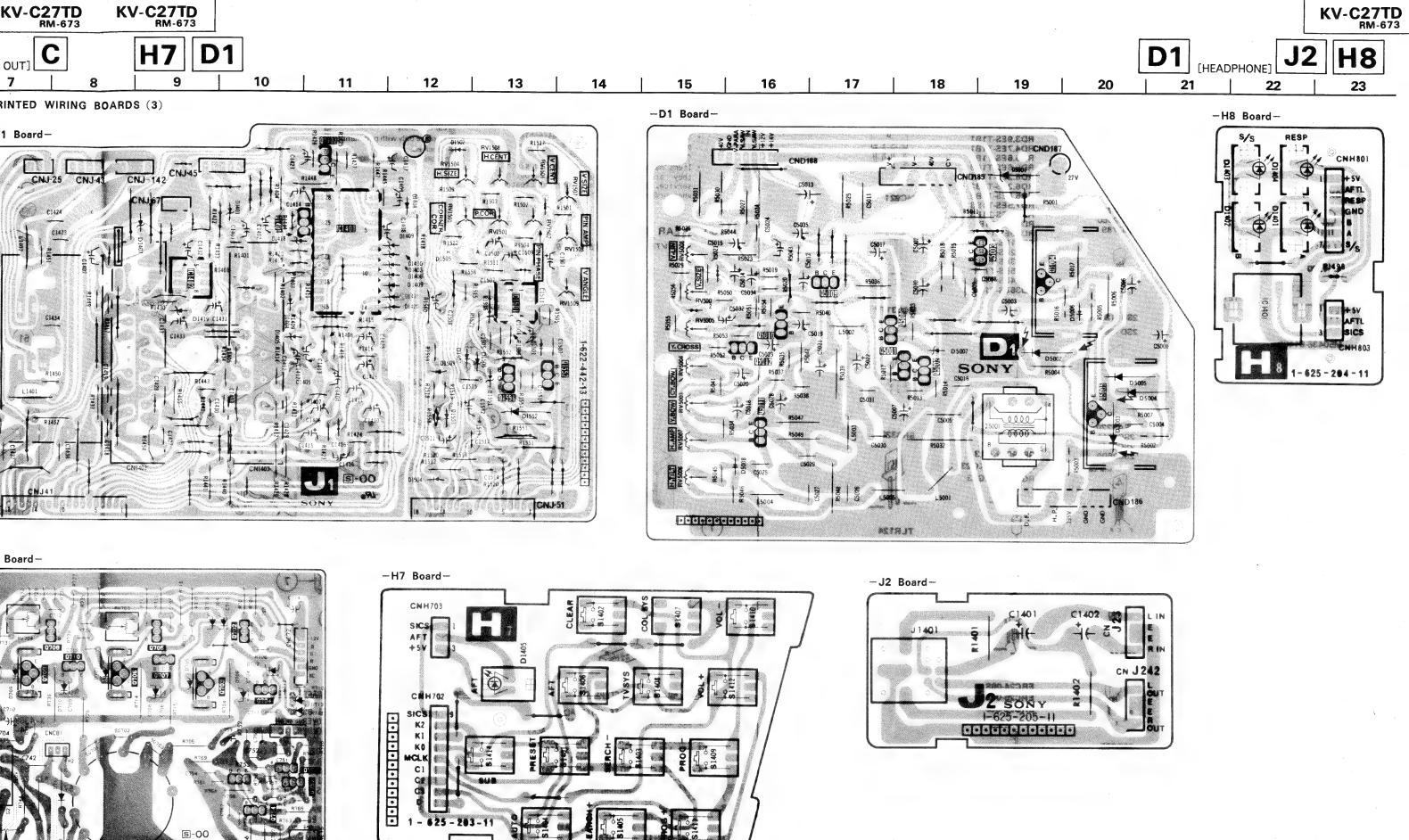
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



**KV-C27TD** KV-C27TD RM-673 RM-673 







## 5-5. SEMICONDUCTORS

(Top view)

**ISS119** KBU-4JL BX-1387 TDA2595 2SB734 **ISS120** 2SC2958 **ISS133** 2SD773 RD3.6ES-T1B2 2SD774 0 RD3.9ES-T1B1 RD4.7ES-T1B1 <del>o o o o o o o o o</del> RD5.6ES-T1B2 RD5.6ES-T1B3 RD6.2ES-T1B1 (Top view) TDA3541 RD6.2ES-T1B2 RD6.8ES-T1B2 CX20061 TDA8442 MC921 **TEA2164** RD7.5ES-T1B3 2SA773 RD9.1ES-T1B3 16 15141 31211 10 9 2SC2060 RD10ES-T181 11111111 وممممممم 2SD789 RD10ES-T1B3 RD11ES-T1B3 12345678 RD12ES-T1B3 RD13ES-T1B2 (Top view) LA4280 RD15ES-T1B1 RD24ES-T1B4 RD36ES-T1B4 **TBA129** TEA2014A TEA2031A MC931TP 2SB1185 2SD1761 M50436-614SP (Top view) 0 0 μPC574J (Top view) M58655P 2SA1220 EQB01-11 SR632D 2SC2611 1413121110 9 8 ERD28-06S 2SC2688 nnannan 2SC2690 GP08DPKG23 RGP01-17PKG23 RGP10GPKG23 2SA1091 TOP VIEW JA101TP MAB8461P-W136 JC501TP TDA4555 TDA4580 **TLR124** TDA6200 **TDA6600** 2SD1548 TEA2026A **TEA2028B CTU-12S SAA5231** DTA114ES μPD4364CX015L DTA144ES cath DTC114ES DTC124ES DTC144ES 2SD1941 MB88503H-597G **ERC06-15S** ERC24-06S ERC25-06S ERD29-08J (Top view) SAA5243E 2SD795 2SA1175 1 5 X Z X 2SC 2785 TOP VIEW TDA2556 CE

## **SECTION 6 EXPLODED VIEWS**

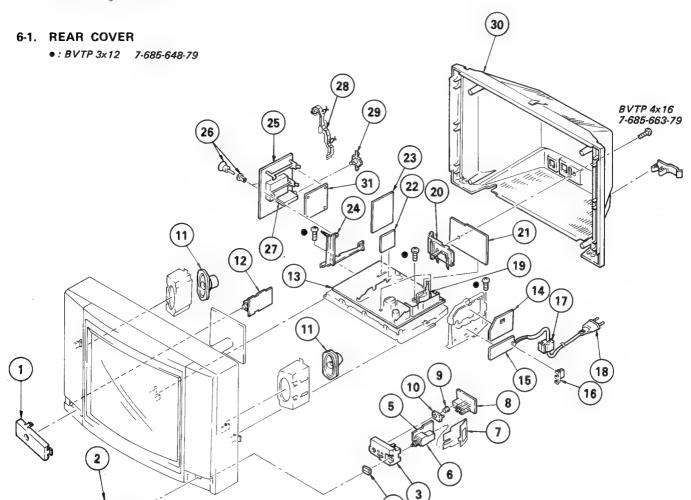
## NOTE:

- · Items with no part number and no description are not stocked because they
- cription are not stocked because they are seldom required for routine service.

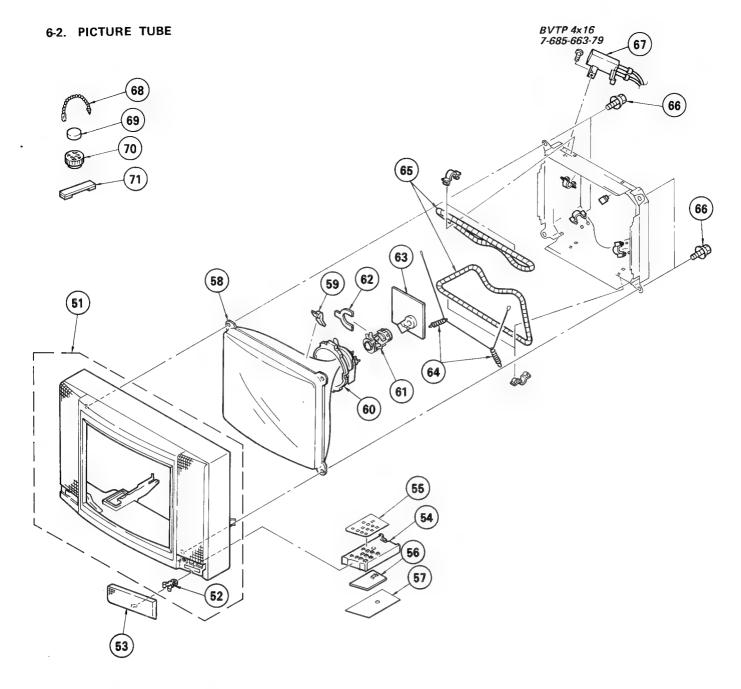
  The construction parts of an assembled part are indicated with a collation number in the remark column.

  Items marked " \* are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark A are critical for safety. Replace only with part number specified.



No.	Part No.	Description	Remark	No.	Part No.	<u>Description</u> <u>Remark</u>
1	4-389-112-11	PLATE (B)(GRAY)		15	*1-625-199-11 *4-386-620-01	F1 BOARD COVER, POWER
2		PLATE (A) ASSY (BLACK)		17	<b>1 ∆</b> 4-022-115-01	HOLDER, AC CORD
_		PLATE (A) ASSY (GRAY)			1-559-346-11	
3	*4-389-124-01	PANEL, POWER SWITCH		18	<b>1-559-912-12 1-559-912-12</b>	CORD, POWER (WITH CONNECTOR)(AUS ONLY)
4	4-389-106-01		•	19	A.1-439-429-21	
_				20	*4-386-624-11	
2	*1-625-200-11			21	*A-1371-384-A	
9	<b>▲</b> 1-571-410-11		1 4 4	22	*1-625-206-11	KS BOARD
/	*4-387-804-01	INSULATOR		23		
0	*1-625-204-11			24	*4-386-629-11	
10	*4-374-987-01	,		25	*A-1296-317-A	A BOARD, COMPLETE
10	*4-381-686-01			26	4-386-618-01	RIVET, T TYPE
11	1-503-642-11				A.1-463-881-11	TUNER, ET (UV-617)
12 13	*1-625-205-11			28	*4-386-628-11	SUPPORTER, PC BOARD
14		D BOARD, COMPLETE		29	*4-386-617-01	
14	"M-1341-047-A	D1 BOARD, COMPLETE		1 30	4-389-122-01	COVER, REAR
				31	*A-1347-014-A	V BOARD, COMPLETE



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	X-4389-104-1	CABINET ASSY (BLACK)	52	61	1-452-391-21	NECK ASSY, PICTURE TUBE (NA305)	
	X-4389-104-2	CABINET ASSY (GRAY)	52	62	1-452-146-21		
52	4-374-714-01	CATCH, PUSH		63		C BOARD, COMPLETE	
53	X-4389-102-1	COVER ASSY, ORNAMENTAL (BLACK)		j 64	4-303-774-XX	SPRING	
	X-4389-102-2	COVER ASSY, ORNAMENTAL (GRAY)		65	A.1-426-278-12	COIL, DEMAGNETIZATION	
54	4-389-123-01	PANEL, CONTROL		66			
55	4-389-109-01	LABEL, CONTROL		67		RESISTOR ASSY, HIGH-VOLTAGE	
56	*1-625-203-11	H7 BOÁRD		68		CLIP LEAD WIRE	
57	*4-389-103-01	COVER, H7		69		MAGNET, DISK; 10MM ø	
58	1.8-736-653-05	PICTURE TUBE (A64 JK J60X)(AEP ON	LY)	70	1-452-094-00		
58	▲ 8-736-654-05	PICTURE TUBE (A64JKJ10X)(AUS ON	LY)	71		PERMALLOY ASSY, CONVERGENCE	
59	3-703-961-01	SPACER, DY	-	i		, , , , , , , , , , , , , , , , , , , ,	
60	A.1-451-255-41	DEFLECTION YOKE (SV-164)		•			

The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

# SECTION 7 ELECTRICAL PARTS LIST

В

## NOTE:

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

- · All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS COILS 
• MF :  $\mu$ F, PF :  $\mu\mu$ F 
• MMH :  $\mu$ H, UH :  $\mu$ H

#### Note:

In this parts list, the mounting diagram is for a different product. Therefore, an excess of parts is listed.

Ref.No. Part No.	Description	Description			Ref.No.	Part No.	Description			Remark
*A-1135-493-A <u>C</u> AF	*A-1135-493-A B BOARD, COMPLETE ************  CAPACITOR				C367   C368   C381   C382   C384	1-101-004-00 1-101-880-00 1-124-902-00 1-124-927-11 1-124-477-11	CERAMIC CERAMIC ELECT ELECT ELECT	0.01MF 47PF 0.47MF 4.7MF 47MF	5% 20% 20% 20%	50V 50V 50V 50V 16V
C301 1-110-179-81 C302 1-110-179-81 C303 1-126-101-11 C304 1-110-179-81 C305 1-124-119-00	MYLAR MYLAR ELECT MYLAR ELECT	0.22MF 0.22MF 100MF 0.22MF 330MF	10% 10% 20% 10% 20%	100V 100V 16V 100V 16V	C386   C387   C1311	1-124-927-11 1-124-927-11 1-124-902-00 1-101-880-00 1-102-965-00	ELECT ELECT ELECT CERAMIC CERAMIC	4.7MF 4.7MF 0.47MF 47PF 39PF	20% 20% 20% 5% 5%	50V 50V 50V 50V 50V
C306 1-124-902-00 C307 1-124-902-00 C308 1-124-902-00 C309 1-124-902-00 C310 1-110-175-81	ELECT ELECT ELECT ELECT MYLAR	0.47MF 0.47MF 0.47MF 0.47MF 0.1MF	20% 20% 20% 20% 10%	50V 50V 50V 50V 100V	CNB72	*1-562-370-21 *1-564-895-11		TOR 6P	ARD 18P	
C311 1-110-175-81 C312 1-124-902-00 C313 1-124-902-00 C314 1-124-902-00 C315 1-124-499-11	MYLAR ELECT ELECT ELECT ELECT	0.1MF 0.47MF 0.47MF 0.47MF 1MF	10% 20% 20% 20% 20%	100V 50V 50V 50V 50V	CNB93	*1-564-880-31 *1-560-278-00 *1-560-290-00	PLUG. CONNEC	TOR 6P	PITCH)	
C319 1-124-477-11 C322 1-101-888-00 C325 1-124-477-11 C326 1-101-004-00 C327 1-101-004-00	ELECT CERAMIC ELECT CERAMIC CERAMIC	47MF 68PF 47MF 0.01MF 0.01MF	20% 5% 20%	16V 50V 16V 50V 50V	CT332	1-141-181-11 DIO				
C331	ELECT ELECT CERAMIC CERAMIC CERAMIC	33MF 330MF 0.022MF 56PF 0.047MF	20% 20% 5%	16V 16V 50V 50V 50V	D301   D302   D303   D304   D305	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119			
C336 1-110-190-81 C337 1-101-004-00 C338 1-101-888-00 C339 1-102-735-00 C340 1-102-953-00	MYLAR CERAMIC CERAMIC CERAMIC CERAMIC	0.01MF 0.01MF 68PF 120PF 18PF	10% 5% 5% 5%	400v 50v 50v 50v 50v	D307 D309	8-719-110-23 8-719-911-19 DEL	DIODE RD11ES DIODE 1SS119	-83		
C341 1-102-978-00 C342 1-102-953-00 C343 1-102-735-00 C344 1-101-888-00 C345 1-102-978-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	220PF 18PF 120PF 68PF 220PF	5% 5% 5% 5%	50V 50V 50V 50V 50V	         IC301	1-415-187-13 <u>IC</u> 8-759-923-81	IC TDA4580			
C346 1-102-074-00 C347 1-124-499-11 C349 1-136-173-00 C350 1-110-171-81 C352 1-110-182-81	ELECT FILM MYLAR	0.001MF 1MF 0.47MF 0.047MF 0.022MF	10% 20% 5% 10% 10%	50V 50V 50V 100V 250V	IC331	8-759-941-98 8-759-947-20 1-235-534-11	IC TDA4555-V CONTROL MODU		:	
C353 1-102-506-00 C354 1-102-074-00 C355 1-102-679-00 C360 1-101-004-00 C361 1-101-004-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	7PF 0.001MF 120PF 0.01MF 0.01MF	0.5PF 10% 5%	50V 50V 50V 50V 50V	L301   L302   L304   L331   L332	1-410-868-21 1-410-868-21 1-410-470-11 1-410-469-21 1-404-539-11	INDUCTOR INDUCTOR INDUCTOR INDUCTOR COIL	4.7UH 4.7UH 10UH 8.2UH		
C364 1-101-361-00 C365 1-124-477-11 C366 1-124-477-11	ELECT	150PF 47MF 47MF	5% 20% 20%	50 V 16 V 16 V	L333   L334   L335	1-404-554-11 1-404-554-11 1-404-554-11	COIL COIL COIL			

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

specified.

Ref.No. Part No.	Description	Remark	Ref.No. Part No. Description Remark
L339 1-410-868-21	INDUCTOR 4.7UH		R358
TRA	NSISTOR		R363 1-249-418-11 CARBON 1.2K 5% 1/4W
Q302 8-729-178-54 Q303 8-729-178-54 Q305 8-729-900-36 Q311 8-729-178-54 Q312 8-729-178-54	TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR DTC124ES TRANSISTOR 2SC2785 TRANSISTOR 2SC2785		R368
Q313 8-729-178-54 Q316 8-729-178-54 Q334 8-729-178-54 Q335 8-729-178-54 Q381 8-729-900-36	TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR DTC124ES		R378
Q382 8-729-178-54 Q1305 8-729-178-54 Q1306 8-729-117-54	TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SA1175		R383
	SISTOR		R391 1-249-404-00 CARBON 82 5% 1/4W
R301 1-249-409-11 R302 1-249-409-11 R303 1-249-409-11 R304 1-249-409-11 R305 1-249-421-11	CARBON 220 5% 1/4W CARBON 220 5% 1/4W CARBON 220 5% 1/4W CARBON 220 5% 1/4W CARBON 2.2K 5% 1/4W		R392
R307 1-249-441-11 R308 1-249-414-11 R309 1-249-405-11 R310 1-249-405-11 R311 1-249-405-11	CARBON 100K 5% 1/4W CARBON 560 5% 1/4W CARBON 100 5% 1/4W CARBON 100 5% 1/4W CARBON 100 5% 1/4W		R1302
R312 1-249-409-11 R313 1-249-433-11 R314 1-249-413-11 R315 1-249-407-11 R316 1-249-407-11	CARBON 220 5% 1/4W CARBON 22K 5% 1/4W CARBON 470 5% 1/4W CARBON 150 5% 1/4W CARBON 150 5% 1/4W		VARIABLE RESISTOR RV331 1-230-504-11 RES, ADJ, CARBON 220
R317 1-249-407-11 R318 1-249-429-11 R319 1-249-409-11 R320 1-249-417-11 R321 1-249-421-11	CARBON 150 5% 1/4W CARBON 10K 5% 1/4W CARBON 220 5% 1/4W CARBON 1K 5% 1/4W CARBON 2.2K 5% 1/4W		TRANSFORMER  T331 1-404-584-11 COIL  CRYSTAL
R322 1-249-420-11 R323 1-249-421-11 R324 1-249-426-11 R325 1-249-429-11 R326 1-249-419-11	CARBON 1.8K 5% 1/4W CARBON 2.2K 5% 1/4W CARBON 5.6K 5% 1/4W CARBON 10K 5% 1/4W CARBON 1.5K 5% 1/4W		X332 1-567-131-00 OSCILLATOR, CRYSTAL  YC MODULE
R327 1-249-427-11			YCM301 1-235-753-21 YC MODULE
R328 1-249-397-11 R329 1-249-397-11 R330 1-249-397-11	CARBON 6.8K 5% 1/4W CARBON 22 5% 1/4W CARBON 22 5% 1/4W CARBON 22 5% 1/4W		   ***********************************
R331 1-249-418-11	CARBON 22 5% 1/4W CARBON 1.2K 5% 1/4W		*1-625-199-11 F1 BOARD *******
R332 1-249-401-11 R333 1-249-412-11 R334 1-249-408-11 R335 1-249-415-11 R336 1-249-418-11	CARBON 47 5% 1/4W CARBON 390 5% 1/4W CARBON 180 5% 1/4W CARBON 680 5% 1/4W CARBON 1.2K 5% 1/4W		CAPACITOR    C1601 1-136-518-11 FILM 0.33MF 20% 300V   C1602 1-136-519-11 FILM 0.47MF 20% 300V
R337 1-215-438-00 R338 1-249-429-11 R344 1-249-437-11 R346 1-249-419-11 R347 1-249-429-11	CARBON 5.1K 5% 1/4W CARBON 10K 5% 1/4W CARBON 47K 5% 1/4W CARBON 1.5K 5% 1/4W CARBON 10K 5% 1/4W CARBON 10K 5% 1/4W		C1602A_1-136-519-11
R348 1-249-437-11	CARBON 47K 5% 1/4W		COMMECTOR
R352 1-247-891-00 R353 1-247-891-00 R356 1-249-427-11 R357 1-249-409-11	CARBON 330K 5% 1/4W CARBON 330K 5% 1/4W CARBON 6.8K 5% 1/4W CARBON 220 5% 1/4W		CONNECTOR   CNF61 *1-566-664-11 PIN, CONNECTOR 4P   CNF64 *1-506-349-21 3P PLUG (L)   CNF65 *1-508-765-00 3P PLUG (M)

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Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
CNF66 *1-508-786-00 CNF67 *1-560-290-00 CNF162*1-506-347-21	2P PLUG (M) PLUG, CONNECT 4P PLUG	TOR (2.5MM P	ITCH)		C121   C122   C123   C124   C125	1-101-003-00 1-101-003-00 1-101-003-00 1-101-888-00 1-101-888-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	0.0047MF 0.0047MF 0.0047MF 68PF 68PF	5% 5%	50V 50V 50V 50V 50V
FUS	<u>E</u>				1 (127	1 101 002 00	CEDANIC	0.004745		500
F1601A 1-532-350-11 1-533-149-00	HOLDÉR, FUSE			 gá.	C127   C128   C129   C130   C131	1-101-003-00 1-124-963-11 1-101-888-00 1-101-004-00 1-101-006-00	CERAMIC ELECT CERAMIC CERAMIC CERAMIC	0.0047MF 33MF 68PF 0.01MF 0.047MF	20% 5%	50V 16V 50V 50V 50V
LIC	TER				C132	1-124-499-11	ELECT	1MF	20%	50 <b>y</b>
LF1601 1-421-866-12 LF1602 1-421-776-11	LFT				C133 C134 C135 C136	1-101-003-00 1-124-499-11 1-101-004-00 1-101-006-00	CERAMIC ELECT CERAMIC CERAMIC	0.0047MF 1MF 0.01MF 0.047MF	20%	50V 50V 50V 50V
KES	ISTOR				C137	1-102-961-00	CERAMIC	27 <b>PF</b>	5%	50V
R1601A 1-247-879-91 R1602A 1-244-945-91 R1603A 1-217-328-11 R1604A 1-247-879-91 R1605A 1-247-289-11	CARBON CARBON WIREWOUND CARBON CARBON	100K 5% 1M 5% 2.7 10% 100K 5% 8.2M 5%	1/4W 1/2W 7W 1/4W 1W	F .	C138 C139 C140 C141	1-124-499-11 1-123-875-11 1-108-614-11	ELECT ELECT MYLAR FILM	1MF 10MF 0.001MF 0.0033MF	20% 20% 10% 2%	50V 50V 100V 100V
R1606A 1-217-777-11	MIDEMOUND	100 10%	10W	F	C142	1-102-816-00	CERAMIC	120 PF	5%	50 <b>V</b>
		100 .10%	TOM		C143 C144 C145	1-101-361-00 1-124-477-11 1-124-477-11	ELECT ELECT	150 PF 47MF 47MF	5% 20% 20%	50V 16V 16V
THE	RMISTOR				C146	1-124-477-11	ELECT	47MF	20%	16V
THP601 1-806-387-11	THERMISTOR (	POSITIVE)			C147 C148	1-124-477-11 1-123-875-11	ELECT ELECT	47MF 10MF	20% 20%	16V 50V
******	********	*****	*****	*****	C149 C150	1-136-153-00 1-136-153-00	FILM	0.01MF	5%	50V
*1-625-200-11	F2 BOARD				C151	1-124-908-11	FILM ELECT	0.01MF 22MF	5% 20%	50 <b>v</b> 50 <b>v</b>
1-506-348-XX	4P PLUG				C152 C153 C154	1-124-908-11 1-136-165-00 1-136-169-00	FILM	22MF 0.1MF 0.22MF	20% 5% 5%	50V 50V 50V
SWI	ITCH				C155	1-124-963-11 1-136-157-00	ELECT FILM	33MF 0.022MF	20% 5%	16V 50V
S1701 <u>A</u> 1-571-410-11	SWITCH, PUSH	(AC POWER)(	1 KEY).		C157	1-136-161-00		0.047MF	5%	50V
******	*****	*****	*****	*****	C158   C159	1-124-963-11 1-124-477-11	ELECT ELECT	33MF 47MF	20% 20%	16V 16V
*A-1296-317-A	A ROADD COM	DICTE			C161 C162	1-124-477-11	ELECT	47MF	20%	16V
M-1230-317-A	******	****			İ	1-102-816-00	CERAMIC	120PF	5%	50V
*4-380-698-01	CASE (MAIN),	SHIELD, A1			C163	1-124-927-11 1-110-190-81		4.7MF 0.01MF	20% 10%	50V 400V
*4-380-699-01 *4-382-701-01	CASE (UPPER CASE (BOTTOM	LID), SHIELD	), Al		C165	1-136-287-11 1-124-499-11	FILM ELECT	0.0047MF 1MF	5% 20%	50 <b>V</b> 50 <b>V</b>
	0,102 (20170)	210/, 011120	.0, /1		C168	1-110-179-81		0.22MF	10%	100v
CAF	PACITOR				C169	1-123-875-11	ELECT	10MF	20%	50 <b>v</b>
C101 1-124-908-11	ELECT	22MF	20%	50V	C170   C171	1-101-004-00 1-101-004-00	CERAMIC CERAMIC	0.01MF 0.01MF		50V 50V
C102 1-126-103-11	ELECT	470MF	20%	16V	C174	1-124-499-11	ELECT	1MF	20%	50V
C104 1-110-173-81	MYLAR MYLAR	0.1MF 0.068MF	10% 10%	100V 100V	C177	1-102-119-00	CERAMIC	0.0015MF	10;	50 <b>v</b>
C105 1-110-173-81	MYLAR	0.068MF	10%	100V	C187	1-101-003-00 1-124-963-11	CERAMIC ELECT	0.0047MF 33MF	20;	50V 16V
C106 1-101-004-00	CERAMIC	0.01MF		50V	C189	1-124-963-11	ELECT	33MF	20;	16V
C107 1-102-963-00 C108 1-124-963-11	CERAMIC ELECT	33PF 33MF	5% 20%	50V 16V	C190	1-110-175-81	MYLAR	0.1MF	10;	1000
C109 1-101-003-00 C110 1-124-499-11	CERAMIC ELECT	0.0047MF 1MF	20%	50V 50V		CED	AMIC			
		3	LUM		00101		RAMIC			
C112 1-101-003-00	CERAMIC CERAMIC	0.0047MF 0.0047MF		50V 50V	CD102	1-404-750-11 1-404-745-11	DISCRIMINATO	OR. CERAMIC		
C113 1-101-003-00 C114 1-124-963-11	CERAMIC ELECT	0.0047MF 33MF	20%	50V 16V	[ CD103	1-404-746-11	DISCRIMINATO	OR, CERAMIC		
C117 1-102-978-00	CERAMIC	220PF	5%	50 y	İ		TER			
C118 1-101-880-00		47PF	5%	50 <b>v</b>			TER			
C119 1-126-101-11 C120 1-124-925-11	EL ECT EL ECT	100MF 2.2MF	20% 20%	16V 50V	CF101   CF103	1-404-134-00 1-527-840-00	TRAP, CERAMI FILTER, CERA	IC (5.5MHZ) AMIC		
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Replace only with part number specified.

Ref.	No. Part No.	Descript	ion	Rema	rk   Ref.N	o. Part No.	Description				Remark
CF1 CF1 SWF	No. Part No.  04 1-527-839-00  05 1-527-839-00  1-404-717-11	FILTER, ( FILTER, S	CERAMIC CERAMIC SURFACE WAVE		R111   R112   R113   R114   R115	1-249-421-11 1-249-411-11 1-249-413-11	CARBON CARBON CARBON	1.2K 2.2K 330 470 470		1/4W 1/4W 1/4W 1/4W 1/4W	
					   R116	1-249-419-11					
	-	ODE			R117   R118   R119   R121	1-249-431-11	CARBON CARBON CARBON	1.5K 15K 4.7K 1K 10K	5%	1/4W 1/4W 1/4W 1/4W 1/4W	
D105 D106 D108	8-719-109-92 8-719-911-19 8-719-000-06	DIODE RD6 DIODE 1SS DIODE MC9	3.2ES-B1 3119 21		R122   R123   R124   R125   R126	1-249-436-11 1-249-417-11 1-249-423-11 1-249-429-11 1-249-436-11	CARBON CARBON CARBON CARBON CARBON	39K 1K 3.3K 10K 39K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
	10				   R127	1-249-432-11				1/4W	
1C10 1C10 1C10 1C10	3 8-759-013-18 4 8-759-946-99	IC TDA354 IC TDA255 IC TDA660 IC TDA259 IC TBA129	1 6 0 5-V7		R128   R129   R130   R132	1-249-432-11 1-249-429-11 1-249-429-11 1-249-414-11	CARBON CARBON CARBON CARBON CARBON	18K 18K 10K 10K 560	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
					R133   R134	1-249-425-11 1-249-414-11	CARBON CARBON	4.7K 560	5% 5%	1/4W	
. 101	<u>COI</u>				R135	1-249-419-11 1-249-414-11	CARBON CARBON	1.5K	5%	1/4W 1/4W	
L101	1-410-116-11	INDUCTOR INDUCTOR	82 UH 560 UH		R137	1-249-414-11	CARBON	560 560	5% 5%	1/4W 1/4W	
L103 L104 L105	1-410-467-21 1-408-411-00 1-410-482-31	INDUCTOR INDUCTOR INDUCTOR	5.6UH 15UH 100UH		R138 R140 R141 R142	1-249-419-11 1-249-441-11 1-249-425-11	CARBON			1/4W 1/4W 1/4W	
L106 L107	1-410-476-11 1-410-467-21	INDUCTOR INDUCTOR	33UH 5.6UH		R143	1-249-441-11 1-249-441-11	CARBON CARBON	100K 100K	5% 5%	1/4W 1/4W	
L108 L109 L110	1-410-473-11 1-410-473-11 1-410-064-11	INDUCTOR INDUCTOR INDUCTOR	18UH 18UH 2.7MMH		R144   R146   R148	1-249-422-11 1-249-424-11 1-249-413-11	CARBON CARBON CARBON	2.7K 3.9K 470	5% 5% 5%	1/4W 1/4W 1/4W	
L111 L112 L113	1-410-482-31 1-410-471-11 1-410-460-11	INDUCTOR INDUCTOR INDUCTOR	100UH 12UH 1.5UH		R150 R151	1-249-423-11 1-249-423-11	CARBON CARBON	3.3K 3.3K	5% 5%	1/4W 1/4W	
		NSISTOR	1.50		R152   R153   R154   R155	1-249-431-11 1-249-416-11 1-249-441-11	CARBON CARBON CARBON		5% 5% 5%	1/4W 1/4W 1/4W	
Q101	8-729-900-61		DTAILAES		R156	1-249-430-11 1-247-881-00	CARBON CARBON	12K 120K	5% 5%	1/4W 1/4W	
Q102 Q104 Q105 Q106	8-729-900-61 8-729-900-61 8-729-178-54	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	DTA114ES DTA114ES 2SC2785		R160   R162   R163   R165	1-249-424-11	CARBON CARBON CARBON	680 3.9K	-	1/4W 1/4W 1/4W	
Q107 Q108	8-729-117-54	TRANSISTOR	2SC2785		R166	1-249-437-11	CARBON		5% 5%	1/4W 1/4W	
Q109 Q110 Q111	8-729-117-54	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	DTC144ES 2SA1175		R172   R173   R188   R189	1-249-414-11	CARBON CARBON CARBON	560 1.5K	5% 5%	1/4W 1/4W 1/4W	
Q112 Q113	8-729-178-54 8-729-178-54	TRANSISTOR TRANSISTOR	2SC2785 2SC2785				CARBON  ABLE RESISTOR		5%	1/4W	
	252				RV101	1-237-753-11					
R101		STOR	4.0		I KATOS	1-237-751-11 1-237-753-11	የድና ለበነ ሶላው	DON 100			
R102 R103 R104	1-249-423-11 1-249-433-11 1-249-429-11	CARBON CARBON CARBON CARBON	100 5% 3.3K 5% 22K 5% 10K 5%	1/4W 1/4W 1/4W 1/4W			SFORMER	DUN 4/K			
R105	1-249-418-11	CARBON	1.2K 5%	1/4W	T101	1-404-493-00	COIL				
R106 R107 R108 R109	1-249-421-11	CARBON CARBON CARBON CARBON	330K 5% 2.2K 5% 2.2K 5%	1/4W 1/4W 1/4W	T102   T103	1-404-493-00	COIF COIF				
R110	1 240 440 44	CARBON	3.3K 5% 390 5%	1/4W 1/4W		TUNE	-				
					TU101A	.1-463-881-11	FUNER, ET (UV-	617)	es sty	A.44	8 *



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Ref.No.	Part No.	Description			Remark	Ref.No	. Part No.	Description				Remark
	*A-1330-854-A	C BOARD, COM	PLETE				TRA	NSISTOR				
C703	<u>CAP</u> 1-102-980-00	ACITOR CERAMIC	270PF	5%	50V	Q702 Q703 Q704 Q705	8-729-178-54 8-729-326-11 *4-386-664-01 8-729-200-17 8-729-178-54	TRANSISTOR 2S TRANSISTOR 2S SPRING; Q703 TRANSISTOR 2S TRANSISTOR 2S	C2611 SA1091			
C704 C705 C706 C709	1-102-116-00 1-102-978-00 1-102-116-00 1-102-116-00	CERAMIC CERAMIC CERAMIC CERAMIC	680 PF 220 PF 680 PF 680 PF	10% 5% 10% 10%	50V 50V 50V 50V	Q706 Q707 Q707	8-729-326-11 *4-386-664-01 8-729-200-17 8-729-178-54	TRANSISTOR 2S SPRING; Q706 TRANSISTOR 2S TRANSISTOR 2S	C2611			
C710 C711 C712 C714 C717	1-123-947-00 1-101-880-00 1-102-980-00 1-124-360-00 1-102-114-00	ELECT CERAMIC CERAMIC ELECT CERAMIC	10MF 47PF 270PF 1000MF 470PF	20% 5% 5% 20% 10%	250V 50V 50V 16V 50V	Q709         Q710   Q751   Q752	8-729-326-11 *4-386-664-01 8-729-200-17 8-729-178-54 8-729-178-54	TRANSISTOR 2S  SPRING; Q709  TRANSISTOR 2S  TRANSISTOR 2S  TRANSISTOR 2S  TRANSISTOR 2S	SA1091 SC2785			
C718 C719 C741 C742 C751	1-102-114-00 1-102-114-00 1-129-714-00 1-162-116-00 1-101-361-00	CERAMIC CERAMIC FILM CERAMIC CERAMIC	470PF 470PF 0.01MF 680PF 150PF	10% 10% 10% 10% 5%	50V 50V 630V 2KV 50V	Q753 Q754	8-729-103-43	TRANSISTOR 2S	B734			
C752	1-110-181-81	MYLAR	0.018MF	10%	250V		RES	SISTOR				
C753 C754 C757 C759	1-110-190-81 1-102-980-00 1-106-367-00 1-123-875-11	MYLAR CERAMIC MYLAR ELECT	0.01MF 270PF 0.01MF 10MF	10% 5% 10% 20%	400V 50V 200V 50V	R704   R705   R706   R707   R708	1-216-486-00 1-202-824-00 1-249-409-11 1-249-412-11 1-249-401-11	METAL OXIDE SOLID CARBON CARBON CARBON	8.2K 3.3K 220 390 47	5% 10% 5% 5% 5%	3W 1/2W 1/4W 1/4W 1/4W	F
C760 C761 C762	1-124-917-11 1-101-006-00 1-110-190-81		33MF 0.047MF 0.01MF	20% 10%	50V 50V 400V	R710   R712   R713   R714	1-215-465-00 1-249-417-11 1-215-471-00 1-216-486-00	METAL CARBON METAL METAL OXIDE	68K 1K 120K 8.2K	1% 5% 1% 5%	1/6W 1/4W 1/6W 3W	F
CNC71		INECTOR				R715	1-202-824-00	SOL ID	3.3K	10%	1/2W	
CNC72 CNC73 CNC75	*1-506-349-21 *1-564-883-11 *1-564-880-31 *1-564-879-11 *1-560-123-00	PLUG, CONNEC PLUG, CONNEC	TOR 3P TOR 2P	PITCH)		R716   R717   R719   R720   R723	1-249-409-11 1-249-415-11 1-249-401-11 1-249-423-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	220 680 47 3.3K 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
	*1-508-765-00 *1-508-784-00	3P PLUG (M) 1P PLUG				R726   R727   R728   R729   R730	1-202-824-00 1-249-409-11 1-216-347-11 1-249-416-11 1-249-401-11	SOLID CARBON METAL OXIDE CARBON CARBON	3.3K 220 0.68 820 47	10% 5% 5% 5% 5%	1/2 W 1/4 W 1W 1/4 W 1/4 W	F
D701	8-719-110-14	DIODE RD9.1E	S-B3			į   R731	1-249-423-11	CARBON	3.3K	5%	1/4 W	
D702 D703 D704 D705	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119				R732 R733 R734 R735	1-249-415-11 1-249-415-11 1-249-405-11 1-215-493-00	CARBON CARBON CARBON METAL	680 680 100 1M	5% 5% 5% 1%	1/4 W 1/4 W 1/4 W 1/6 W	
D706 D707 D708 D709 D710	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119	) 			R736   R737   R739   R742   R744	1-216-486-00 1-215-481-00 1-249-417-11 1-202-838-00 1-202-844-00	METAL OXIDE METAL CARBON SOLID SOLID	8.2K 330K 1K 100K 330K		W 1/6 W 1/4 W 1/2 W 1/2 W	F
D711 D713	8-719-924-06 8-719-911-19					R745   R751   R752   R753	1-202-842-11 1-249-418-11 1-249-426-11 1-249-414-11	SOL ID CARBON CARBON CARBON	220K 1.2K 5.6K 560	10% 5% 5% 5%	1/2 W 1/4 W 1/4 W 1/4 W	
1701	JA	<del></del>				R754	1-249-434-11	CARBON	27K	5%	1/4 W	
J701	1 -526-644-51	<u>IL</u>				R755 R756 R757 R758 R760	1-249-405-11 1-249-419-11 1-249-405-11 1-249-409-11 1-249-411-11	CARBON CARBON CARBON CARBON CARBON	100 1.5K 100 220 330	5% 5% 5% 5% 5%	1/4 W 1/4 W 1/4 W 1/4 W 1/4 W	
L 704 L 751	1 -410-878-21 1 -410-474-21	INDUCTOR INDUCTOR	33UH 22UH			R761   R762   R763   R764	1-249-429-11 1-247-895-00 1-249-429-11 1-249-455-11	CARBON CARBON CARBON CARBON	10K 470K 10K 4.7	5% 5% 5% 5%	1/4 W 1/4 W 1/4 W 1/4 W	F



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	Ref.No	. Part No.	Description				Remark	Ref.No.	Part No.	Description				Remark
	R765 R766	1-249-455-11 1-247-753-11	CARBON CARBON	<b>4.7</b> 1.2K	5% 5%	1/4W 1/2W	F		DI	ODE				
	R767 R768	1-247-751-11 1-215-887-00	CARBON METAL OXIDE	820 150	5% 5%	1/2W 2W	F	D5001	8-719-930-11 8-719-911-55		11Z			
	R769	1-212-889-00	FUSIBLE	220	5%	1/4W		D5003	8-719-911-55 8-719-924-06	DIODE U05G	066			
	R770	1-212-869-00	FUSIBLE	33	5%	1/4W	F		8-719-924-06					
		VAR	IABLE RESISTO	OR .				D5006	8-719-911-19	DIODE 1SS119 DIODE RD12ES	0.2			
	RV 703	1-237-749-11	RES, ADJ, CA		200				8-719-911-19	DIODE 1SS119	-83			
	RV 704 RV 741	1-237-749-11 1-226-114-00	RES, ADJ, CA RES, ADJ, ME	RBON 22	200	2M		İ	CO.	Tł				
								i   L5001		COIL, DUST O	ORF 6	SMMH( H	ICC)	
			RK GAP					L 5002	1-408-245-00 1-407-509-00	INDUCTOR INDUCTOR	22M 27M	MH	(60)	
	SG702	1-519-063-XX 1-519-063-XX	DISCHARGING	GAP				L5004	1-408-242-00 1-408-247-00	INDUCTOR INDUCTOR	10M 33M	MH		
		1-519-063-XX						[ 			0011			
	~ # ~ * * * * *	******			*****	*****	*******	i	-	ANSISTOR				
		*A-1341-047-A	********	MPLETE				Q5002	8-729-117-54 8-729-117-54	TRANSISTOR 2	SAI175			
		CAD	ACITOR					Q5004	8-729-195-82 8-729-122-02	TRANSISTOR 2	SA1220			
	C5001	1-124-122-11	ELECT	1.00ME		204	FOV	1	*4-386-664-01					
	C5002	1-124-122-11 1-124-908-11	EL ECT EL ECT	100MF 100MF 22MF		20% 20%	50V 50V	1	8-729-102-39 *4-386-664-01	TRANSISTOR 2 SPRING; Q500	5	A-Q		
	C5004 C5005	1-102-030-00	CERAMIC FILM	330PF 0.015M	e	20% 10%	50V 500V	Q5009	8-729-177-32 8-729-103-43	TRANSISTOR 2 TRANSISTOR 2	SB734			
		1-123-931-00	ELECT	3.3MF	ır	20%	400V 160V		8-729-178-54	TRANSISTOR 2				
	C5007	1-126-101-11 1-102-157-00	ELECT CERAMIC	100MF 560 PF		20% 10%	16V 500V	Q3011 	0-123-133-05	TRANSISTOR 2	502958			
	C5009	1-106-353-00 1-124-963-11	MYLAR ELECT	0.0027 33MF	MF	10%	100V 16V		RES	ISTOR				
	C5011	1-106-387-00	MYLAR	0.068M	F	10%	200V		1-216-429-00 1-247-704-11	METAL OXIDE CARBON	270 220	5% 5%	1W 1/4W	F F
	C5013	1-110-327-81 1-123-363-00	MYLAR ELECT	0.33MF 470MF		10% 20%	100V 50V	R5003	1-249-399-11 1-215-869-11	CARBON METAL OXIDE	33 1K	5% 5%	1/4W 1W	F F
	C5014 C5016	1-131-349-00 1-110-171-81	TANTALUM MYLAR	2.2MF 0.047M	F	10% 10%	35 V 100 V	R5005	1-249-395-11	CARBON	15	5%	1/4W	F
	C5017	1-126-101-11	ELECT	100MF		20%	160	R5007	1-216-350-11 1-216-440-00	METAL OXIDE	1.2 18K	5% 5%	1W 1W	F F
	C5019	1-124-908-11 1-124-925-11	EL ECT EL ECT	22MF 2.2MF		20% 20%	50V 50V	R5011 R5012	1-212-990-00 1-249-423-11	FUSIBLE CARBON	220 3.3K	5% 5%	1/2W 1/4W	F
	C5021	1-124-908-11 1-123-382-00	EL ECT EL ECT	22MF 3.3MF		20% 20%	50V 50V		1-249-429-11	CARBON	10K	5%	1/4W	
	C5022 C5023	1-124-122-11 1-124-477-11	ELECT	100MF		20%	50v	R5015	1-249-423-11 1-249-421-11	CARBON CARBON	3.3K 2.2K	5% 5%	1/4W 1/4W	
	C5024 C5025	1-124-122-11	EL ECT EL ECT	47MF 100MF 0.0068	ме	20% 20%	16V   50V	R5017	1-249-405-11 1-216-350-11	CARBON METAL OXIDE	100	5% 5%	1/4W 1W	F F
		1-110-184-81	MYLAR MYLAR	0.033M		10% 10%	400V 250V		1-249-393-11	CARBON	10	5%.	1/4W	F
	C5027 C5028	1-110-174-81 1-123-875-11	MYLAR ELECT	0.082M 10MF	F	10% 20%	1000	R5020	1-249-439-11	CARBON CARBON	68K 100K	5% 5%	1/4W 1/4W	
	C5029	1-110-182-81 1-110-187-81	MYLAR MYLAR	0.022M 0.0056		10% 10%	50V 250V 400V	R5023	1-249-429-11	CARBON CARBON	10K 15K	5% 5%	1/4W 1/4W	_
	C5031	1-129-701-00	FILM	0.01MF	rat.	5%	100V		1-215-868-00	METAL OXIDE	680	5%	1W	F
	C5034	1-131-349-00	TANTALUM	2.2MF		10%	35V	R5029	1-249-434-11 1-249-411-11 1-216-354-11	CARBON CARBON METAL OXIDE	27K 330	5% 5%	1/4W 1/4W	r
		CONI	NECTOR				į	R5032	1-215-908-00 1-249-411-11	METAL OXIDE CARBON	2.7 33 330	5% 5%	1W 3W 1//W	F F
	CND185*	 1-508-766-00					İ		1-249-429-11	CARBON	10K	5% 5%	1/4W 1/4W	
	CND186*	1-508-767-00 1-508-784-00	5P PLUG 1P PLUG				į	R5035	1-249-429-11 1-249-395-11	CARBON CARBON	10K 10K 15	5% 5%	1/4W 1/4W	
	CND188*	1-564-884-31	PLUG, CONNEC	TOR 7P				R5037	1-249-407-11 1-249-434-11	CARBON CARBON	150 27K	5% 5%	1/4W 1/4W	
										v. movii	C/K	J 70	A/ 7M	

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Ref.No.	Part No.	Description		•		Remark	Ref.No.	Part No.	Description			Remark
R5041 R5042	1-216-451-11 1-249-435-11 1-249-414-11 1-249-435-11 1-249-419-11	METAL OXIDE CARBON CARBON CARBON CARBON	120 5 33K 5 560 5 33K 5 1.5K 5	% 1/ % 1/ % 1/	1 F /4W /4W /4W /4W	-       	C253 C254 C255 C256 C257	1-124-122-11 1-124-927-11 1-124-927-11 1-110-175-81 1-101-004-00	ELECT ELECT ELECT MYLAR CERAMIC	100MF 4.7MF 4.7MF 0.1MF 0.01MF	20% 20% 20% 10%	50V 50V 50V 100V 50V
R5046 R5047	1-249-421-11 1-249-406-11 1-249-403-11 1-216-423-11 1-247-753-11	CARBON CARBON CARBON METAL OXIDE CARBON	2.2K 5 120 5 68 5 27 5 1.2K 5	% 1/ % 1/ % 1W	/4W /4W /4W / F	F	C258 C260 C265 C266 C401	1-110-175-81 1-110-175-81 1-102-074-00 1-102-074-00 1-124-477-11	MYLAR MYLAR CERAMIC CERAMIC ELECT	0.1MF 0.1MF 0.001MF 0.001MF 47MF	10% 10% 10% 10% 20%	100V 100V 50V 50V 16V
R5049 R5056	1-215-865-11 1-249-411-11	METAL OXIDE CARBON	220 5 330 5		1 F /4W	F	C403 C501 C502 C503 C504	1-124-477-11 1-124-927-11 1-124-927-11 1-110-192-81 1-101-361-00	ELECT ELECT ELECT MYLAR CERAMIC	47MF 4.7MF 4.7MF 0.015MF 150PF	20% 20% 20% 10% 5%	16V 50V 50V 400V
RV5003 RV5004 RV5005	1-230-504-11 1-228-990-00 1-228-993-00 1-228-991-00 1-228-991-00	RES, ADJ, CAI RES, ADJ, CAI RES, ADJ, CAI RES, ADJ, CAI RES, ADJ, CAI	- RBON 220 RBON 1K RBON 4.7K RBON 2.2K				C505 C506 C507 C508 C509	1-108-794-91 1-110-182-81 1-110-327-81 1-110-182-81 1-110-175-81	MYLAR MYLAR	0.0015MF 0.022MF 0.33MF 0.022MF 0.1MF	5% 10% 10% 10% 10%	50V 50V 250V 100V 250V 100V
	1-228-989-00 1-228-999-00	RES, ADJ, CAI RES, ADJ, CAI NSFORMER				       	C510 C511 C512 C513 C514	1-161-959-00 1-108-620-11 1-110-175-81 1-108-614-11 1-110-179-81	CERAMIC MYLAR MYLAR MYLAR MYLAR	22 PF 0.0033MF 0.1MF 0.001MF 0.22MF	10% 10% 10% 10%	500V 100V 100V 100V 100V
*****	1-413-059-00 ***********************************	**************************************	******** PLETE		*****	           	C515 C516 C517 C518 C519	1-124-499-11 1-108-614-11 1-124-252-00 1-124-902-00 1-136-173-00	ELECT MYLAR ELECT ELECT FILM	1MF 0.001MF 0.33MF 0.47MF	20% 10% 20% 20% 5%	50 <b>v</b> 100v 50 <b>v</b> 50 <b>v</b> 50 <b>v</b>
4	*4-341-751-01 *4-341-751-01 *4-341-752-01	PAWL PAWL EYELET	****				C520 C521 C524 C525 C526	1-102-121-00 1-110-175-81 1-106-355-12 1-102-973-00 1-102-947-00	CERAMIC MYLAR MYLAR CERAMIC CERAMIC	0.0022MF 0.1MF 0.0033MF 100PF 10PF	10% 10% 5% 5% 0.5 PF	50V 100V 50V 50V 50V
	CAP	ACITOR					C534	1-124-120-11 1-124-499-11	ELECT	220MF	20%	167
C001 C003 C004 C005	1-110-175-81 1-123-875-11 1-102-074-00	CERAMIC MYLAR ELECT CERAMIC	100PF 0.1MF 10MF 0.001MF	5% 10% 20% 10%	% ! % !	50V   100V   50V   50V	C537 C538 C539 C591	1-108-614-11 1-102-820-00 1-123-875-11	ELECT MYLAR CERAMIC ELECT	1MF 0.001MF 330PF 10MF	20% 10% 5% 20%	50V 100V 50V 50V
C007 C008 C009 C010 C011	1-110-171-81 1-101-880-00 1-101-884-00 1-126-101-11 1-101-004-00	MYLAR CERAMIC CERAMIC ELECT CERAMIC	0.047MF 47PF 56PF 100MF 0.01MF	109 5% 5% 209	%	100V   50V   50V   16V   50V	C592 C593 C601 C602 C603	1-124-477-11 1-102-820-00 1-161-964-00 1-161-964-00 1-161-964-00	ELECT CERAMIC CERAMIC CERAMIC CERAMIC	47MF 330PF 0.0047MF 0.0047MF 0.0047MF	20% 5%	16V 50V 250V 250V 250V
CO12 CO13 CO14 CO15 CO16	1-126-101-11 1-101-004-00 1-124-463-00 1-126-101-11 1-101-004-00	ELECT CERAMIC ELECT ELECT CERAMIC	0.01MF 0.1MF 100MF 0.01MF	209 209 209	% ! % !	16V                             	C604 C605 C606 C607 C608	1-125-318-00 1-124-122-11 1-110-175-81 1-130-019-91 1-123-875-11	ELECT(BLOCK) ELECT MYLAR FILM ELECT	220MF 100MF 0.1MF 0.0012MF 10MF	20% 20% 10% 5% 20%	400V 50V 100V 50V 50V
C017 C018 C019 C021 C022	1-123-875-11 1-102-980-00 1-110-171-81 1-102-973-00 1-124-477-11	ELECT CERAMIC MYLAR CERAMIC ELECT	10MF 270PF 0.047MF 100PF 47MF	209 5% 109 5% 209	% ! % !	50V                             	C611 C612 C613 C614 C615	1-124-122-11 1-162-115-00 1-136-088-00 1-102-030-00 1-124-557-11	ELECT CERAMIC FILM CERAMIC ELECT	100MF 330 PF 0.0022MF 330 PF 1000MF	20% 10% 3% 10% 20%	50V 2KV 2KV 500V 25V
CO24	1-124-499-11 1-102-125-00 1-102-125-00 1-110-175-81 1-101-361-00	ELECT  CERAMIC  CERAMIC  MYLAR  CERAMIC	1MF 0.0047MF 0.0047MF 0.1MF 150PF	209	% ! % ! % !	50V   50V   50V   100V   50V	C616 C618 C619 C620 C621	1-102-030-00 1-124-637-11 1-124-556-11 1-102-074-00 1-124-347-00	CERAMIC ELECT ELECT CERAMIC ELECT	330 PF 1000MF 2200MF 0.001MF 100MF	10% 20% 20% 10% 20%	500V 50V 16V 50V 160V
C029 C031 C251	1-102-121-00 1-124-120-11 1-124-927-11 1-124-927-11	CERAMIC ELECT ELECT ELECT	0.0022MF 220MF 4.7MF 4.7MF		% ! % !	50V   50V   16V   50V	C622 C623 C624 C625 C626	1-124-556-11 1-124-910-11 1-124-122-11 1-124-360-00 1-123-875-11	ELECT ELECT ELECT ELECT ELECT	2200MF 47MF 100MF 1000MF 10MF	20; 20; 20; 20;	16V 50V 50V 16V 50V



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Replace only with part number specified.

Ref.No. Part No.	Description		Remark	Ref.No.	Part No.	Description	Remark
C627 1-102-074-00 C628 1-124-360-00 C631 1-124-927-11 C632 1-102-074-00 C633 1-124-927-11	ELECT 1000M ELECT 4.7MF	20% 20% MF 10%	50V 16V 50V 50V 50V	D008   D009   D011   D254   D501	8-719-109-89 8-719-911-19 8-719-110-14	DIODE RD9.1ES-B3	
C636	ELECT 470MF CERAMIC 330PF ELECT 22MF	20% 10% 20%	50V 50V 500V 250V 2KV	D506   D508   D591   D592   D593	8-719-000-12 8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119	
C806 1-110-175-81 C807 1-106-395-00 C810 1-123-024-00 C811 1-136-117-00 C812 1-123-943-00	MYLAR 0.15M ELECT 33MF FILM 2MF		100V 200V 160V 200V 250V	D601 A D602 D603 D604 D605	8-719-924-06 8-719-911-55 8-719-911-55		
C813 1-102-212-00 C814 A. 1-161-731-11 C815 1-136-053-00 C817 1-136-686-11 C818 1-136-687-11	CERAMIC   0.00	LMF 10% F 5% BMF 3%	500V 2KV 200V 1.4KV 630V	D606   D607   D608   D610   D611	8-719-924-06 8-719-925-06 8-719-300-59	DIODE ERC24-06 S DIODE ERC24-06 S DIODE ERC25-06 S DIODE CTU-12 S DIODE ERD28-06 S	
C819 A 1-161-731-11 C820 1-110-189-81 C821 A 1-162-116-51 C822 1-102-114-00 C823 1-110-186-81	MYLAR 0.00 CERAMIC 680P CERAMIC 470P	F 10% F 10%	2KV 400V 2KV 50V 400V	D612 D613 D614 D615 D616	8-719-924-06 8-719-924-06 8-719-109-90	DIODE CTU-12S DIODE ERC24-06S DIODE ERC24-06S DIODE RD5.6ES-B3 DIODE RD6.2ES-B2	
C824 1-102-212-00 C825 1-110-182-81 C826 1-123-875-11	MYLAR 0.02	2MF 10%	500V 250V 50V	D617 D618 D619 D620	8-719-109-89		
	TER			   D622	8-719-911-19	DIODE 1SS119	
CF001 1-567-686-11 CF501 1-567-888-11	OSCILLATOR, CERAM OSCILLATOR, CERAM	IC ·		D623 D624 D627 D630	8-719-911-19 8-719-911-19 8-719-911-19 8-719-110-39	DIODE 1SS119 DIODE 1SS119	
CO	NECTOR			D632	8-719-110-16	DIODE RO10ES-81	
CN801 *1-508-765-00 CND01 *1-564-884-11 CND02 *1-564-886-11 CND11 *1-566-660-11 CND12 *1-564-884-11	PLUG, CONNECTOR 7 PLUG, CONNECTOR 9 CONNECTOR, HINGE	P (PLUG) 18P		D633 D801 D802 D803	8-719-911-19 8-719-924-06 8-719-924-06 8-719-300-65	DIODE 1SS119 DIODE ERC24-U6S DIODE ERC24-O6S	
CND21 *1-564-346-00 CND23 *1-560-124-00 CND31 *1-564-346-00 CND41 *1-566-367-11 CND45 *1-564-882-11	CONNECTOR, BOARD PLUG, CONNECTOR ( CONNECTOR, BOARD CONNECTOR, HINGE	TO BOARD 18P 2.5MM PITCH) TO BOARD 18P (RECEPTACLE)		D804   D805   D806   D807   D808	8-719-945-80 8-719-900-26	DIODE UOSG DIODE ERCO6-15S DIODE ERCO6-15S DIODE ERD29-08J	
CND51 *1-566-367-11 CND64 *1-506-349-21 CND82 *1-508-765-00 CND83 *1-508-786-00 CND84 *1-564-038-00	3P PLUG (É) 3P PLUG (M) 2P PLUG (M)				<u>IC</u> 8-759-630-06		
CND86 *1-508-766-00 CND88 *1-564-884-31 CND91 *1-560-123-00 CND92 *1-560-125-00 CND94 *1-560-123-00	PLUG, CONNECTOR PLUG, CONNECTOR PLUG, CONNECTOR	(2.5MM) 3P (2.5MM) 5P		1 1C003	8-759-971-68 8-759-603-41 8-759-157-40 8-759-803-31 *4-368-683-01	IC UPC574J IC LA4280	
	ODE			IC501	8-759-913-13 8-759-970-73 8-759-946-23	IC TEA2028B IC TEA2164	
	DIODE 1SS119				*4-386-642-01	HEAT SINK, IC; IC601	
D002 8-719-911-19	DIODE 1SS119 DIODE 1SS119				CO	IL	
D004 8-719-911-19	DIODE 153119 DIODE RD3.9ES-B1			   L001   L601	1-410-475-21		
D007 8-719-109-89	DIODE RD5.6ES-B2			602		FERRITE BEAD INDUCTOR	

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Ref.No. Part No.	Description	Remark	Ref.No.	Part No.	Description		Remark
L603 1-410-396-41 L605 1-459-442-00 L606 1-421-013-00 L607 1-410-482-31 L801 1-459-087-00	FERRITE BEAD INDUCTOR COIL (WITH CORE) COIL, (HOLIZONTAL CHOKE) 25UH INDUCTOR 100UH COIL, HCC DUST CORE 3.9MMH		R016 R017 R018 R019 R020	1-249-429-11 1-249-417-11 1-249-417-11 1-249-433-11 1-249-433-11	CARBON	10K 5% 1K 5% 1K 5% 22K 5% 22K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
L803 1-459-104-00 L804 1-408-239-00 L805 1-459-697-11 L806 1-459-087-00 L807 1-408-242-00	COIL, DUST CORE INDUCTOR 4.7MMH COIL, HORIZONTAL LINEARITY COIL, HCC DUST CORE 3.9MMH INDUCTOR 10MMH  COIL, AIR CORE PMC		R021   R022   R023   R024   R025	1-249-433-11 1-249-433-11 1-249-429-11 1-249-429-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	22K 5% 22K 5% 10K 5% 10K 5% 1K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
L809 *1-420-872-00 L810 1-421-982-11	COIL, AIR CORE		R030   R031   R032   R033	1-249-425-11 1-249-429-11 1-249-417-11 1-249-413-11	CARBON CARBON CARBON CARBON	4.7K 5% 10K 5% 1K 5% 470 5%	1/4W 1/4W 1/4W 1/4W
	LINK		R034 	1-249-413-11	CARBON	470 5%	1/4W
PS601 1-532-984-91 PS602 1-532-675-91	LINK, IC		R035 R036 R037 R038 R039	1-249-431-11 1-249-421-11 1-249-417-11 1-249-417-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	15K 5% 2.2K 5% 1K 5% 1K 5% 1K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
0001 0 700 170 54	Theuser of 000705		ĺ				•
Q001 8-729-178-54 Q002 8-729-117-54 Q003 8-729-117-54 Q004 8-729-117-54 Q252 8-729-900-36	TRANSISTOR 2SC2785 TRANSISTOR 2SA1175 TRANSISTOR 2SA1175 TRANSISTOR 2SA1175 TRANSISTOR 2SA1175 TRANSISTOR DTC124ES-TP		R040   R041   R042   R043   R044	1-249-417-11 1-249-417-11 1-249-417-11 1-249-417-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	1K 5% 1K 5% 1K 5% 1K 5% 1OK 5%	1/4W 1/4W 1/4W 1/4W 1/4W
Q501 8-729-117-54 Q502 8-729-117-54 Q503 8-729-178-54 Q505 8-729-177-43 Q506 8-729-103-43	TRANSISTOR 2SA1175 TRANSISTOR 2SA1175 TRANSISTOR 2SC2785 TRANSISTOR 2SD774 TRANSISTOR 2SB734		R045   R046   R048   R049   R050	1-249-417-11 1-249-429-11 1-249-417-11 1-249-417-11 1-249-433-11	CARBON CARBON CARBON CARBON CARBON	1K 5% 10K 5% 1K 5% 1K 5% 22K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
Q507 8-729-117-54 Q591 8-729-178-54 Q598 8-729-178-54 Q601 8-729-904-32 Q602 8-729-209-02	TRANSISTOR 2SA1175 TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SB1185-E TRANSISTOR 2SB1185-E TRANSISTOR 2SB1548-LR		R051   R052   R053   R054   R057	1-249-429-11 1-249-439-11 1-249-437-11 1-249-417-11 1-249-409-11	CARBON CARBON CARBON CARBON CARBON	10K 5% 68K 5% 47K 5% 1K 5% 220 5%	1/4W 1/4W 1/4W 1/4W 1/4W
*4-368-683-01 Q603 8-729-904-32 Q604 8-729-378-91 Q605 8-729-178-54 Q606 8-729-178-54	SPRING; Q602 TRANSISTOR 2SB1185-E TRANSISTOR 2SD789 TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SC2785 TRANSISTOR 2SD1761-E TRANSISTOR 2SD1761-E SPRING; Q608 TRANSISTOR 2SD789 TRANSISTOR 2SD789 TRANSISTOR 2SC2785		R058   R061   R062   R063   R064	1-249-409-11 1-249-417-11 1-249-411-11 1-249-431-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	220 5% 1K 5% 330 5% 15K 5% 10K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
Q607 8-729-904-27 Q608 8-729-904-27 *4-368-683-01 Q609 8-729-378-91 Q801 8-729-178-54	TRANSISTOR 2SD1761-E TRANSISTOR 2SD1761-E SPRING; Q608 TRANSISTOR 2SD789 TRANSISTOR 2SC2785		R067   R068   R069   R070   R071	1-249-413-11 1-249-421-11 1-249-423-11 1-249-417-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	470 5% 2.2K 5% 3.3K 5% 1K 5% 1K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
Q804 8-729-304-50 *4-368-683-01 Q805 8-729-168-82	TRANSISTOR 2SD1941-06 SPRING; Q804 TRANSISTOR 2SC2688		R072   R073   R074   R075   R077	1-249-417-11 1-249-417-11 1-249-417-11 1-249-417-11 1-249-413-11	CARBON CARBON CARBON CARBON CARBON	1K 5% 1K 5% 1K 5% 1K 5% 470 5%	1/4W 1/4W 1/4W 1/4W 1/4W
<u>RE</u> :	SISTOR		j				
R001 1-249-417-11 R002 1-249-417-11 R003 1-249-417-11 R004 1-249-417-11 R005 1-249-411-11	CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 330 5% 1/4W		R078   R079   R080   R081   R083	1-249-423-11 1-249-435-11 1-249-429-11 1-249-441-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	3.3K 5% 33K 5% 10K 5% 10OK 5% 10K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
R006 1 -249-417-11 R007 1 -249-405-11 R008 1 -249-417-11 R009 1 -249-417-11 R010 1 -249-413-11	CARBON 1K 5% 1/4W CARBON 100 5% 1/4W CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 470 5% 1/4W		R084   R085   R086   R087   R088	1-249-413-11 1-249-429-11 1-249-417-11 1-249-417-11 1-249-425-11	CARBON CARBON CARBON CARBON CARBON	470 5% 10K 5% 1K 5% 1K 5% 4.7K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
R011 1-249-417-11 R012 1-249-417-11 R013 1-249-417-11 R014 1-249-417-11	CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W CARBON 1K 5% 1/4W		R090 R091 R093 R094 R095	1-249-413-11 1-249-409-11 1-249-429-11 1-249-429-11 1-249-409-11	CARBON CARBON CARBON CARBON CARBON	470 5% 220 5% 10K 5% 10K 5% 220 5%	1/4 w/ 1/4 w/ 1/4 w/ 1/4 w/ 1/4 w/



Ref.	lo. Part No.	Description				Remark	Ref.No.	Part No.	Description			•	Remark
R096 R097 R098 R099 R251	1-249-429-11 1-249-429-11 1-215-900-11	CARBON CARBON CARBON METAL OXIDE CARBON	220 10K 10K 22K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 2W 1/4W	F	R556 R557 R558 R559 R560	1-249-405-11 1-249-425-11 1-247-895-00 1-249-427-11 1-249-411-11	CARBON CARBON CARBON	100 4.7K 470K 6.8K 330	5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R252 R253 R255 R256 R260	1-249-413-11 1-249-385-11 1-249-385-11	CARBON CARBON CARBON CARBON CARBON	470 470 2.2 2.2 10	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F F	R591   R592   R593   R594   R595	1-249-427-11 1-249-429-11 1-249-429-11 1-249-424-11 1-249-417-11	CARBON CARBON CARBON	6.8K 10K 10K 3.9K 1K	5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R261 R262 R263 R264 R265	1-249-421-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	10K 470 2.2K 2.2K 4.7K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R596   R597   R598   R599   R602	1-249-425-11 1-249-425-11 1-249-405-11 1-249-405-11 1-215-901-00	CARBON CARBON CARBON CARBON METAL OXIDE	4.7K 4.7K 100 100 33K		1/4W 1/4W 1/4W 1/4W 2W	F
R266 R401 R402 R410 R411	1-249-425-11 1-249-434-11 1-249-435-11 1-249-413-11 1-249-413-11	CARBON CARBON CARBON CARBON CARBON	4.7K 27K 33K 470 470	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R603 R604 R605 R606 R607	1-216-359-00 1-249-414-11 1-215-469-00 1-215-440-00 1-249-434-11	METAL OXIDE CARBON METAL CARBON CARBON	6.8 560 100K 6.2K 27K	5% 5% 1% 5%	1W 1/4W 1/6W 1/4W 1/4W	F
R412 R500 R501 R502 R503	1-249-413-11 1-215-487-00 1-249-413-11 1-249-409-11 1-249-410-11	CARBON CARBON CARBON CARBON CARBON	470 560K 470 220 270	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R608   R609   R610   R611   R612	1-215-901-00 1-249-401-11 1-249-385-11 1-249-385-11 1-217-193-00	METAL OXIDE CARBON CARBON CARBON WIREWOUND	33K 47 2.2 2.2 0.27	5% 5% 5% 5% 10%	2W 1/4W 1/4W 1/4W 2W	F F F
R504 R505 R506 R507	1-215-427-00 1-249-431-11 1-249-428-11 1-247-891-00	METAL CARBON CARBON CARBON	1.8K 15K 8.2K 330K	1% 5% 5% 5%	1/6W 1/4W 1/4W 1/4W		R613   R614   R616   R617   R618	1-249-401-11 1-205-919-11 1-249-417-11 1-249-411-11 1-218-022-51	CARBON WIREWOUND CARBON CARBON METAL OXIDE	47 220 1K 330 560	5% 10% 5% 5% 5%	1/4W 10W 1/4W 1/4W 1W	F
R509 R510 R511 R512 R513	1-249-424-11 1-249-426-11 1-249-429-11 1-247-891-00 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	3.9K 5.6K 10K 330K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R619 R620 R621 R622 R623	1-249-429-11 1-249-433-11 1-249-431-11 1-249-429-11 1-249-377-11	CARBON CARBON CARBON CARBON CARBON	10K 22K 15K 10K 0.47	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R514 R515 R516 R517 R518	1-249-409-11 1-249-423-11 1-249-408-11 1-249-429-11 1-249-437-11	CARBON CARBON CARBON CARBON CARBON	220 3.3K 180 10K 47K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W			1-249-411-11 1-218-017-51 1-249-411-11 1-218-019-51 1-249-393-11	CARBON METAL OXIDE CARBON METAL OXIDE CARBON	330 220 330 330 10	5% 5% 5% 5%	1/4W 1W 1/4W 1W 1/4W	
R519 R520 R521 R522 R523	1-249-433-11 1-249-411-11 1-249-405-11 1-215-469-00 1-249-417-11	CARBON CARBON CARBON METAL CARBON	22K 330 100 100K 1K	5% 5% 5% 1% 5%	1/4W 1/4W 1/4W 1/6W 1/4W			1-249-411-11 1-249-437-11 1-249-405-11 1-218-020-51 1-249-429-11	CARBON CARBON CARBON METAL OXIDE CARBON	330 47K 100 390 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1W 1/4W	
R524 R525 R528 R529 R530	1-249-421-11 1-249-417-11 1-249-408-11 1-249-427-11 1-249-448-11	CARBON CARBON CARBON CARBON CARBON	2.2K 1K 180 6.8K 1.2	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F	R642 R643 R647	1-249-429-11 1-216-343-00 1-217-192-21 1-216-485-11 1-216-485-11	CARBON METAL OXIDE WIREWOUND METAL OXIDE METAL OXIDE	10K 0.33 0.22 5.6K 5.6K	5% 5% 10% 5% 5%	1/4W 1W 2W 3W 3W	F F F
R534 R536 R538 R539 R540	1-215-491-00 1-249-749-00 1-247-883-00 1-247-883-00 1-249-399-11	CARBON CARBON CARBON CARBON CARBON	820K 2.2M 150K 150K 33	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	 	R650 R651 R652	1-249-385-11 1-249-417-11 1-249-405-11 1-247-903-00 1-249-443-11	CARBON CARBON CARBON CARBON CARBON	2.2 1K 100 1M 0.47	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R541 R542 R546 R549 R550	1-249-438-11 1-249-425-11 1-249-434-11 1-215-890-11 1-249-440-11	CARBON CARBON CARBON METAL OXIDE CARBON	56K 4.7K 27K 470 82K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 2W 1/4W	F I	R806 R807 R809	1-249-448-11 1-249-439-11 1-218-025-51 1-202-821-11 1-202-818-00	CARBON CARBON METAL OXIDE SOLID SOLID	1.2 68K 1K 1.8K 1K	5% 5% 5% 10% 10%	1/4W 1/4W 1W 1/2W 1/2W	F
R551 R552 R553 R554 R555	1-249-749-00 1-218-026-51 1-218-025-51 1-249-411-11 1-249-749-00	CARBON METAL OXIDE METAL OXIDE CARBON CARBON	2.2M 1.2K 1K 330 2.2M	5% 5%	1/4W 1W 1W 1/4W 1/4W	       	R812 R815 R816	1-215-882-00 1-244-917-00 1-215-884-11 1-218-023-51 1-249-417-11	METAL OXIDE CARBON METAL OXIDE METAL OXIDE CARBON	22 68K 47 680 1K	5% 5% 5% 5% 5%	1/2W	F

The components identified by shading and mark A are critical for safety.

Replace only with part number specified.





	Ref.No.	Part No.	Description				Remark	Ref.No.	Part No.	Description			Remark	_
	R820 R821 R822 R825 R826	1-249-403-11 1-247-725-11 1-217-778-11 1-216-342-11 1-249-441-11	CARBON CARBON FUSIBLE METAL OXIDE CARBON	68 10K 1K 0.27 100K	5% 5% 5% 5% 5%	1/4W 1/4W 1W 1W 1/4W	F F	C19 C20 C21 C24 C25	1-110-171-81 1-102-978-00 1-110-173-81 1-126-101-11 1-124-477-11	CERAMIC	0.047MF 220PF 0.068MF 100MF 47MF	10% 5% 10% 20% 20%	100V 50V 100V 16V 16V	
	R827 R828 R829 R830 R831	1-249-429-11 1-249-423-11 1-249-415-11 1-249-429-11 1-215-088-00	CARBON CARBON CARBON CARBON METAL	10K 3.3K 680 10K 2.2	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C27   C28   C29   C51   C52	1-102-820-00 1-102-116-00 1-124-927-11 1-110-175-81 1-110-175-81	CERAMIC ELECT MYLAR	330PF 680PF 4.7MF 0.1MF	5% 10% 20% 10% 10%	50V 50V 50V 100V 100V	
	R1005 R1006	1-249-421-11 1-249-408-11 1-249-408-11 1-249-408-11	CARBON CARBON CARBON CARBON	2.2K 180 180 180	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C53   C54   C55   C56   C57	1-110-175-81 1-110-175-81 1-110-175-81 1-110-175-81 1-102-074-00	MYLAR MYLAR	0.1MF 0.1MF 0.1MF 0.1MF 0.001MF	10% 10% 10% 10% 10%	100V 100V 100V 100V 50V	
	R5501 R5502 R5503	1-249-417-11 1-249-429-11 1-249-417-11 1-249-389-11 1-247-903-00	CARBON CARBON CARBON CARBON CARBON	1K 10K 1K 4.7 1M	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C58 C59	1-102-074-00 1-102-074-00 FIL	CERAMIC	0.001MF 0.001MF	10% 10%	50V 50V	
	1,0004	1-247-303-00	CARBON	211	0.0	27 111		   CP01	1-235-977-11	_	S THICK FIL	м		
		VAR	IABLE RESISTOR	3				CPO2	1-235-977-11					
RV501 1-228-991-00 RES, ADJ, CARBON 2.2K RV502 1-230-630-11 RES, ADJ, CARBON 10K RV601 1-228-990-00 RES, ADJ, CARBON 1K							CT01	TRIMMER  CTO1 1-141-181-11 CAP, TRIMMER						
		SPA	RK GAP											
	SG801	1-519-063-XX	DISCHARGING, (	GAP	,				DIO					
TRANSFORMER  T601 ⚠ 1-448-961-11 S.R.T					D01   D02   D03   D04   D07	DO2 8-719-110-36 DIODE RD13ES-B2 DO3 8-719-911-19 DIODE 1SS119 DO4 8-719-109-69 DIODE RD3.6ES-B2								
T602 1-424-011-11 TRANSFORMER, PULSE T801 1-437-090-21 HDT						800	8-719-109-96	DIODE RD6.8ES-B1						
		TER	MINAL PIN	•					īc					
	TP91	*1-535-084-00		PIN				I ICO1	8-759-972-41	IC MAB8461P	-W136			
*****************						1000	8-759-946-85	IC SAA5243E						
	,	*A-1347-014-A						1C04 	8-759-113-01	IC UPD4364C	X-15 <u>L</u>			
			******	****					<u>C01</u>					
		CAF	PACITOR					L01	1-408-411-00 1-410-468-11	INDUCTOR INDUCTOR	15UH 6.8UH			
	C01	1-126-101-11 1-124-120-11	ELECT ELECT	100MF 220MF		20% 20%	16V 16V	L03   L04	1-410-468-11 1-410-468-11	INDUCTOR INDUCTOR	6.8UH 6.8UH			
	C03 C04	1-124-119-00 1-124-477-11	ELECT ELECT	330MF 47MF		20% 20%	16V 16V	L05	1-410-468-11	INDUCTOR	6.8UH			
	C05	1-126-101-11	ELECT	100MF		20%	167	L06	1-410-468-11	INDUCTOR	6.8UH			
	C06 C07 C08	1-124-120-11 1-124-499-11 1-102-951-00	ELECT ELECT CERAMIC	220MF 1MF 15 PF		20% 20% 5%	16V 50V 50V		TRA	NSISTOR				
	C09 C10	1-102-931-00 1-102-074-00 1-102-824-00	CERAMIC CERAMIC	0.001 470PF	MF	10% 5%	50V 50V 50V	Q01 Q02 Q03	8-729-904-27 8-729-177-43 8-729-900-80	TRANSISTOR TRANSISTOR TRANSISTOR	2SD774			
	C11 C12 C13 C14	1-110-182-81 1-102-980-00 1-102-973-00 1-102-951-00	MYLAR CERAMIC CERAMIC CERAMIC	0.022N 270PF 100PF 15PF	<b>1</b> F	10% 5% 5% 5%	250V 50V 50V 50V	Q04   Q05     Q06	8-729-178-54 8-729-177-43 8-729-178-54	TRANSISTOR : TRANSISTOR : TRANSISTOR :	2SD774			
	C15	1-102-961-00	CERAMIC	27 PF		5%	50V	Q07   Q09	8-729-178-54 8-729-117-54	TRANSISTOR TRANSISTOR	2SC2785			
	C16 C17 C18	1-110-190-81 1-110-171-81 1-102-953-00	MYLAR	0.01MI 0.047I 18PF		10% 10% 5%	400V 100V 50V	Q10   Q11 	8-729-117-54 8-729-117-54	TRANSISTOR TRANSISTOR	2SA1175			



Ref.N	lo. Part No.	Description				Remark	Ref.No.	Part No.	Description	<u>1</u>		Remark
RESISTOR						CONNECTOR						
R01 R02 R04 R05 R06	1-215-867-00 1-249-425-11 1-215-867-00 1-215-128-00 1-249-417-11	CARBON METAL OXIDE	470 4.7K 470 100 1K	5% 5% 5% 5% 5%	1W 1/4W 1W 1/4W 1/4W	F F	CNJ23   CNJ242   CNJ242	*1-564-893-11 *1-564-893-11	PLUG, CONNE	ECTOR 4P ECTOR 4P		
R07 R08 R09 R13 R14	1-249-405-11 1-249-411-11 1-249-438-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON CARBON CARBON	100 330 56K 100 100	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		 		SISTOR			
R15 R16 R17 R18 R19	1-247-903-00 1-249-420-11 1-249-417-11 1-249-425-11 1-249-411-11	CARBON CARBON CARBON CARBON CARBON	1M 1.8K 1K 4.7K 330	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R1402    ******	1-215-144-00 1-215-144-00	METAL		1/4W 1/4W	*****
R20 R27 R28 R29 R30	1-215-146-00 1-249-399-11 1-249-399-11 1-249-399-11	METAL CARBON CARBON CARBON	560 33 33 33	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		 		*********	.UMP(.E1E .******		
R31 R32 R33 R34 R37	1-215-130-00 1-215-130-00 1-215-130-00 1-249-404-00 1-249-417-11 1-249-405-11	METAL METAL METAL CARBON CARBON CARBON	120 120 120 82 1K 100	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W 1/4W		C1415 C1416 C1418 C1419	1-124-477-11 1-124-902-00 1-124-902-00 1-102-112-00 1-102-112-00 1-110-182-81	ELECT ELECT CERAMIC CERAMIC	47MF 0.47MF 0.47MF 330PF 330PF	20% 20% 20% 10% 10%	16V 50V 50V 50V 50V
R38 R40 R41 R43 R44	1-249-416-11 1-249-425-11 1-249-413-11 1-249-425-11 1-249-413-11	CARBON CARBON CARBON CARBON CARBON	820 4.7K 470 4.7K 470	5%	1/4W 1/4W 1/4W 1/4W 1/4W		C1424 C1427 C1428 C1431	1-110-182-81 1-101-003-00 1-101-003-00 1-124-902-00	MYLAR CERAMIC CERAMIC ELECT	0.022MF 0.022MF 0.0047MF 0.0047MF 0.47MF	10% 10%	250V 250V 50V 50V
R45 R46	1-215-152-00 1-247-779-00	METAL	1K 6.8	5% 5%	1/4W 1/4W		C1433 C1501 C1502	1-124-902-00 1-126-101-11 1-123-875-11 1-123-875-11 1-108-614-11	ELECT	0.47MF 100MF 10MF 10MF 0.001MF	20% 20% 20% 20% 10%	50V 16V 50V 50V 100V
		IABLE RESISTOR	-				C1504 C1505	1-124-910-11 1-110-171-81	ELECT MYLAR	47MF 0.047MF	20% 10%	50V 100V
RV01	1-230-624-51 CON	RES, ADJ, CAR	RBON 22	0			C1507 C1508	1-108-620-11 1-124-499-11 1-124-499-11	MYLAR ELECT	0.0033MF 1MF 1MF	10% 20% 20%	100V 50V 50V
V1	*1-560-123-00	PLUG, CONNECT	TOR (2.	5MM) 3	IP.			1-123-875-11 1-110-188-81	ELECT MYLAR	10MF 0.0068MF	20% 10%	50V 400V
V2 V3 V4 V5	*1-560-125-00 *1-560-126-00 *1-560-123-00 *1-560-290-00	PLUG, CONNECT PLUG, CONNECT PLUG, CONNECT	OR (2. OR (2. OR (2.	5MM) 5 5MM) 6 5MM PI	iP iP TCH)		C1513 C1514 C1515	1-102-963-00 1-110-183-81 1-102-117-00	CERAMIC MYLAR CERAMIC	33PF 0.027MF 820PF	5% 10% 10%	50V 250V 50V
٧6	*1-508-784-00	1 P PLUG					C1551 C1552	1-102-973-00 1-124-122-11	CERAMIC ELECT	100PF 100MF	10% 20%	50V 50V
	CRY	STAL						CON	NECTOR			
X01 X02 X03	1-567-162-00 1-567-495-11 1-567-686-11	OSCILLATOR, COSCILLATOR, CO	RYSTAL ERAMIC				CN1402 CNJ41 * CNJ43 *	1-537-088-11 1-561-534-41 1-566-641-11 1-564-893-11	TERMINAL BOX SOCKET 21P CONNECTOR, F PLUG, CONNEC	HINGE (TAB) 1	18P	
	*1-625-205-11		****	*****	*****	       		1-566-641-11	CONNÉCTOR, I		18P	
	CAP	ACITOR				ļ		DIO	DE			
C1401 C1402	1-126-105-11 1-126-105-11	FLECT	1000MF 1000MF		20% 20%	35V   35V	D1409 D1410 D1419	8-719-110-18 8-719-110-14 8-719-110-14 8-719-110-04 8-719-912-20	DIODE RD9.18 DIODE RD9.18 DIODE RD7.58	ES-B3 ES-B3 ES-B3		

	RM-67
	J1 H7 H8
Ref.No. Part No.	Description Remark
R1558 1-249-425-11 R1559 1-249-441-11	CARBON 4.7K 5% 1/4W CARBON 100K 5% 1/4W
VAR	IABLE RESISTOR
RV1501 1-228-999-00 RV1502 1-224-252-XX RV1503 1-228-995-00 RV1504 1-228-990-00 RV1505 1-228-998-00	RES, ADJ, CARBON 470K RES, ADJ, METAL GLAZE 10K RES, ADJ, CARBON 22K RES, ADJ, CARBON 1K RES, ADJ, CARBON 220K
RV1506 1-228-995-00 RV1508 1-228-994-00 RV1509 1-228-999-00	RES, ADJ, CARBON 22K RES, ADJ, CARBON 10K RES, ADJ, CARBON 470K
*******	***********
*1-625-203-11	H7 BOARD *******
CONN	IECTOR
CNH702*1-564-898-11 CNH703*1-564-892-41	PLUG, CONNECTOR 9P PLUG, CONNECTOR 3P
DIOD	<u>DE</u>
	DIODE TLR124 HOLDER, LED; D1405
SWIT	сн
\$1401 1-571-085-21 \$1402 1-571-085-21 \$1403 1-571-085-21 \$1404 1-571-085-21 \$1405 1-571-085-21	SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE
\$1406	SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE SWITCH, TACTICLE

\*1-625-204-11 H8 BOARD

Remark | Ref.No. Part No.

## CONNECTOR

CNH801\*1-564-896-11 PLUG, CONNECTOR 7P CNH803\*1-564-892-41 PLUG, CONNECTOR 3P

## DIODE

D1402	8-719-101-08 *4-387-801-01 8-719-101-08 *4-387-801-01 8-719-101-08	DIODE SR108D HOLDER, LED; D1401 DIODE SR108D HOLDER, LED; D1402 DIODE SR108D
D1404	*4-387-801-01 8-719-101-08 *4-387-801-01	HOLDER, LED; D1403 DIODE SR108D HOLDER, LED; D1404

Ref.No.	Part No.	Description
D1502	8-719-911-19	DIODE 1SS119
D1504	8-719-911-19	DIODE 1SS119
D1505	8-719-000-12	DIODE MC931
D1506	8-719-110-85	DIODE RD36ES-B4
D1507	8-719-911-19	DIODE 1SS119
D1509	8-719-911-19	DIODE 1SS119
D1551	8-719-110-64	DIODE RD24ES-B4
D1552	8-719-924-06	DIODE ERC24-06S

IC

IC1402 8-759-946-32 IC TEA2014A IC1501 8-759-942-16 IC TEA2031A

## COIL

L1401 1-412-043-11 INDUCTOR, WIDE BAND L1402 1-412-043-11 INDUCTOR, WIDE BAND

## TRANSISTOR

Q1551 8-729-178-54 TRANSISTOR 2SC2785 Q1552 8-729-177-43 TRANSISTOR 2SD774

## RESISTOR

R1417 R1423 R1424 R1428 R1429	1-249-404-00 1-249-426-11 1-249-426-11 1-247-895-00 1-247-895-00	CARBON CARBON CARBON CARBON CARBON	82 5.6K 5.6K 470K 470K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R1430 R1433 R1434 R1437 R1440	1-215-126-81 1-249-409-11 1-249-393-11 1-249-429-11 1-249-415-11	METAL CARBON CARBON CARBON CARBON	82 220 10 10K 680	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R1441 R1442 R1443 R1454 R1455	1 -249-415-11 1 -249-437-11 1 -249-437-11 1 -215-134-00 1 -215-134-00	CARBON CARBON CARBON METAL METAL	680 47K 47K 180 180	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R1501 R1502 R1503 R1504 R1505	1-249-433-11 1-215-455-00 1-247-895-00 1-215-457-00 1-249-433-11	CARBON METAL CARBON METAL CARBON	22K 27K 470K 33K 22K	5% 1% 5% 1% 5%	1/4W 1/6W 1/4W 1/6W 1/4W	
R1506 R1509 R1510 R1511 R1512	1 -247-895-00 1 -249-436-11 1 -249-426-11 1 -249-419-11 1 -249-429-11	CARBON CARBON CARBON CARBON CARBON	470K 39K 5.6K 1.5K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R1513 R1514 R1515 R1516 R1518	1 -249-438-11 1 -249-417-11 1 -215-489-00 1 -249-432-11 1 -249-429-11	CARBON CARBON CARBON CARBON CARBON	56K 1K 680K 18K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R1519 R1520 R1521 R1522 R1551	1 -247-883-00 1 -247-895-00 1 -249-425-11 1 -247-887-00 1 -215-870-11	CARBON CARBON CARBON CARBON METAL OXIDE	150K 470K 4.7K 220K 1.5K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1W	F
R1552 R1553 R1554 R1556	1 -249-433-11 1 -216-434-11 1 -249-411-11 1 -249-426-11	CARBON METAL OXIDE CARBON CARBON	22K 1.8K 330 5.6K	5% 5% 5% 5%	1/4W 1W 1/4W 1/4W	F



The components identified by shading and mark A are critical for safety.
Replace only with part number specified.

							*				
Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description				Remark
IC1401 8-741-138-70		******	****	******	R214   R215   R216   R217   R218	1-249-417-11 1-249-433-11 1-249-433-11 1-249-431-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	1K 22K 22K 15K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
*1-625-206-11 CAP	KS BOARD *******				R219 R221 R222 R225 R226	1-249-429-11 1-249-417-11 1-249-417-11 1-249-417-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	10K 1K 1K 1K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
C202 1-124-902-00 C204 1-124-902-00 C213 1-124-908-11 C214 1-110-188-81 C217 1-110-188-81	ELECT ELECT ELECT MYLAR MYLAR	0.47MF 0.47MF 22MF 0.0068MF 0.0068MF	20% 20% 20% 10%	50V 50V 50V 400V 400V	R227 R228	1-249-417-11 1-249-417-11 *******	CARBON CARBON	1K 1K	5% 5% ****	1/4W 1/4W	*****
C218 1-110-182-81 C219 1-110-182-81 C220 1-108-620-11 C221 1-108-620-11	MYLAR MYLAR MYLAR MYLAR	0.022MF 0.022MF 0.0033MF 0.0033MF	10% 10% 10% 10%	250 V 250 V 100 V 100 V			CELLANEOUS *******  RESISTOR ASSY DEFLECTION YO	/, HIGH	-VOLT/	AGE	
C222 1-110-182-81 C223 1-110-182-81 C224 1-110-190-81	MYLAR MYLAR MYLAR	0.022MF 0.022MF 0.01MF	10% 10% 10%	250V 250V 400V		1-452-032-00 1-452-094-00 1-452-146-21	MAGNET, DISK; MAGNET, ROTAT MAGNET, BMC	1 OMM	ø	5MM ø	
C225 1-136-173-00 C226 1-136-173-00 C227 1-110-182-81 C228 1-110-184-81	FILM FILM MYLAR MYLAR	0.47MF 0.47MF 0.022MF	5% 5% 10%	50V 50V 250V		1-452-391-21 1-503-642-11 1-559-865-11 .1-559-346-11	NECK ASSY, PI SPEAKER LEAD ASSY, HI CORD, POWER (	GH-VOL	TAGE ONNEC	TOR)(AEP	ONLY)
C229 1-110-192-81 C230 1-110-192-81 C231 1-124-902-00 C232 1-123-875-11	MYLAR MYLAR ELECT ELECT	0.015MF 0.015MF 0.015MF 0.47MF 10MF	10% 10% 10% 20% 20%	250V 400V 400V 50V	L901 A 7802 A V901 A	.1-426-278-12 .1-426-278-12 .1-439-418-21 .8-736-653-05 .8-736-654-05	CORD, POWER ( COIL, DEMAGNE TRANSFORMER A PICTURE TUBE	TIZATI ASSY, F (A <b>64</b> JK	ON LYBACK J6OX)	( (AEP ONI	.Y)
C233 1-102-114-00 C234 1-102-114-00 C235 1-102-114-00 C236 1-102-114-00	CERAMIC CERAMIC CERAMIC	470PF 470PF 470PF	10% 10% 10%	50V 50V 50V		*****		****	****		
C236 1-102-114-00 C237 1-124-902-00	CERAMIC ELECT	470PF 0.47MF	10% 20%	50V 50V		******	IES AND PACKIN	*****	RIAS ****	•	
C238 1-102-978-00 C239 1-126-103-11	CERAMIC ELECT	220PF 470MF	5% 20%	50 V 16 V		Part No.	Description				Remark
	NECTOR			104	*	A-1470-844-A 4-380-432-01 4-389-129-01 4-389-130-01 4-389-131-01	COMMANDER ASS BAG, PROTECTI CUSHION (UPPE INDIVIDUAL CA CUSHION (LOWE	ON R) (AS: RTON			
				ĺ		4-389-134-01	CUSHION (FRON				
D205 8-719-110-04 D206 8-719-110-04	 DIODE RD7.5ES	S-B3 S-B3				4-482-576-11 4-482-576-41	MANUAL, INSTR	UCTION UCTION	(FOR (FOR	OTHERS) GERMANY)	
<u>1C</u>				   							
IC201 8-759-013-17	IC TDA6200			İ							
RES	ISTOR										
R204 1 - 249 - 435 - 11 R205 1 - 249 - 435 - 11 R206 1 - 249 - 423 - 11 R207 1 - 249 - 423 - 11 R208 1 - 249 - 431 - 11	CARBON CARBON CARBON CARBON CARBON	33K 5% 33K 5% 3.3K 5% 3.3K 5% 15K 5%	1/4W 1/4W 1/4W 1/4W 1/4W	!   							
R209 1 -249-433-11 R210 1 -249-431-11 R211 1 -249-441-11 R212 1 -249-433-11 R213 1 -249-431-11	CARBON CARBON CARBON CARBON CARBON	22K 5% 15K 5% 100K 5% 22K 5% 15K 5%	1/4W 1/4W 1/4W 1/4W 1/4W	       							